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**Synopsis of the**  
**Parasites of**  
**Vertebrates**  
**of Canada**  
**Ectoparasites of**  
**Terrestrial Mammals**

Murray J. Kennedy

Robert A. Newman

**Alberta**  
AGRICULTURE  
Animal Health Division

DDN 7021185



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Abstract

The synopsis covers Protozoa, Nematodes and Ectoparasites from 122 species of  
vertebrates are distributed among higher taxa as follows: Annel - 122;  
Mollusca - 19; Nematodes - 176 and Protozoa - 23

# **Synopsis of the Parasites of Vertebrates of Canada Ectoparasites of Terrestrial Mammals**

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Murray J. Kennedy

Robert A. Newman

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Alberta Agriculture  
Veterinary Laboratory  
6909 - 116 Street,  
Edmonton, Alberta  
Canada  
T6H 4P2







## **Abstract**

This synopsis contains Parasite-Host and Host-Parasite lists of 323 species of ectoparasites from 122 species of terrestrial mammals. The 323 species of ectoparasites are distributed among higher taxa as follows: Acari - 122; Coleoptera - 4; Diptera - 19; Hemiptera - 1; Mallophaga - 19; Siphonaptera - 134; and Siphunculata - 23.

## PARASITE-HOST LIST

This synopsis contains Parasitology and Microbiology and their respective parts of the synopsis of parasitology from 1924 to 1925. The synopsis of parasitology and microbiology are distributed among various parts as follows: Parasitology - 1; Microbiology - 2; Bacteriology - 3; Pathology - 4; Physiology - 5; Biochemistry - 6; Immunology - 7; Zoology - 8; Botany - 9; Geology - 10; Meteorology - 11; Astronomy - 12; Mathematics - 13; Physics - 14; Chemistry - 15; and other subjects - 16.



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The compiled information covers the period from 1878 to December, 1985, and was gathered from numerous publications in the primary scientific literature. Journal series such as *The Canadian Entomologist*, *Canadian Journal of Zoology*, *Journal of Wildlife Diseases* and the *Journal of Parasitology* were searched in their entirety. Abstracting series such as *Zoological Record* and *Entomology Abstracts* were searched for additional references. Theses and reports of federal and provincial governments, and of other institutions, were not searched extensively; hence some existing records may have been missed.

In providing references to the present host-distribution data, we included only reports based on original records, but reviewing all reports to assure complete inclusion of existing records based on the same methods. Publications that do not provide original descriptive records but deal with some aspect of Canadian cetoparasites are included in a supplementary list of references. References dealing only with experimental infections, or with specimens collected from the ground, water or burrows, or from dead carcasses are generally not included, if they exist. A note was added in the appropriate records.

The synopsis indicates that up to December, 1985, at least 322 species of cetoparasites have been reported from 122 species of mammalian mammals. Parasites not identified to the species level were indicated in the total number. The 322 species are divided among seven orders as follows: Acari - 122; Coleoptera - 4; Diptera - 10; Hemiptera - 5; Mallophaga - 10; Siphonaptera - 3; and Siphonostoma - 23.

The taxonomic arrangement adopted in this paper is economic group of cetoparasites included in Canadian records, in most cases, is as follows:

Acari - Evans 1978

Coleoptera - Arner 1965

Diptera - Arner et al. 1980

Mallophaga - Erwin 1972

Siphonaptera - Holland 1954

Siphonostoma - Stannard and Pratt 1983

All scientific names of North American mammals are given in the form used by Hall (1981). The names of the cetoparasites are given in accordance with the format used by Margolis and Armit (1976) in their *Synopsis of the Parasites of Fishes of Canada*.

The Parasite-Host List is organized by higher taxa of cetoparasites in the following order: Acari, Coleoptera, Diptera, Hemiptera, Mallophaga, Siphonaptera, and Siphonostoma. Species, genera, and family names are listed in alphabetical order within their respective taxonomic ranks, which in the case of a family is either a suborder or an order. Depending on the group in question and the method of including the suborder or order category.

For each parasite species listed, the following information is provided:

- 1) The correct scientific name, including author(s) and date(s), followed by any recognized synonyms that were used in establishing the Canadian records. No attempt was made to evaluate taxonomically the validity of pub-

lished records, but attention is drawn to possible errors.

- 2) The site of occurrence of the parasite(s) on its host(s) is assumed to be the type for the Acari, Coleoptera, Hemiptera, Mallophaga, Siphonaptera, and Siphonostoma. The larval stages of the Diptera are usually listed to substantiate claims to an emergence of their hosts. Comments on additional sites, or alternate sites are given in the remarks section.

- 3) The hosts. Numbers in parentheses after each host name correspond with the numbers assigned in the references establishing the particular parasite-host records. Holland (1954) corrected some non-identifications for the Siphonaptera made by previous authors. For the most part we have used Holland's correction. For example, Wagner (1954) gave *Ceratops* as the host for the host *Muscle Juncus nevadensis*.

- 4) Distribution. (See.) Species distribution is reported by provincial or territory boundaries listed in alphabetical order as follows: Alberta (Alb.), BC (British Columbia), New Brunswick (NB), NB (New Brunswick), ND (North Dakota), NS (Nova Scotia), NWT (Northwest Territories), Ont (Ontario), PEI (Prince Edward Island), Que (Quebec), Sask (Saskatchewan), and YT (Yukon Territory).

- 5) Authors responsible for the published records are listed in alphabetical order. To enable the reader to grasp at a glance the authors responsible for particular parasite-host locality records, we numbered the references listed under "Records" and placed the corresponding number(s) after the host name, and each reference is followed by the locality or localities from which the parasite was (were) reported. When only one host is listed for a particular parasite, no reference is not included, and when all records are from the same locality, the locality was not listed after the authors' names.

- 6) Under remarks, explanatory comments, as required, are offered on specimens, collections, misidentifications, and synonyms of parasites, and by the hosts, sites on or within hosts, and validity of parasite records.

In the Host-Parasite List, within each order, the families, genera, and species are listed alphabetically. After the name of each parasite species, its geographic distribution on the host in question is given in parentheses.

The REFERENCES are given in two parts, the first includes those directly referred to in the text, and the second, SUPPLEMENTARY REFERENCES, consists a list of publications dealing with various aspects of parasites of wild mammals of Canada but which do not contain original parasite-host records.

To facilitate access to information in our parasite-host and host-parasite lists, the publications conclude with an INDEX to records and host-parasite facts.

Obviously a task of this sort is bound to have errors and omissions, and certainly each reader has our responsibility. We hope readers will bring them to our attention. We also hope that colleagues will send us proofs of their current work or papers we missed in their time solutions or correc-





# Introduction

The compiled information covers the period from 1876 to December, 1985, and was extracted from numerous publications in the primary scientific literature. Journal series such as *The Canadian Entomologist*, *Canadian Journal of Zoology*, *Journal of Wildlife Diseases* and the *Journal of Parasitology* were searched in their entirety. Abstracting series such as *Zoological Record* and *Entomology Abstracts* were scanned for additional references. Theses and reports of federal and provincial governments, and of other institutions, were not searched extensively, hence some existing records may have been missed.

In providing references to the parasite-host-distribution data, we included only reports based on original records, but screening all reports to ensure complete exclusion of repetitive records based on the same material was not possible. Publications that do not provide original parasite-host-distribution records but deal with some aspect of Canadian ectoparasites are compiled in a supplementary list of references. References dealing only with experimental infections, or with specimens collected from the ground, nests or burrows, or from dead carcasses are generally not included. If they were, a note was added in the remarks section.

The synopsis indicates that up to December, 1985, at least 322 species of ectoparasites have been reported from 122 species of terrestrial mammals. Parasites not identified to the species level are not included in the total number. The 322 species are divided among seven major taxa as follows: Acari - 122; Coleoptera - 4; Diptera - 19; Hemiptera - 1; Mallophaga - 19; Siphonaptera - 134; and Siphunculata - 23.

The taxonomic arrangement adopted for each major taxonomic group of ectoparasite included in Canadian records, in most cases, is as follows:

- Acari - Krantz 1978
- Coleoptera - Arnett 1968
- Diptera - Arnett et al. 1980
- Mallophaga - Emerson 1972
- Siphonaptera - Holland 1984
- Siphunculata - Stojanovich and Pratt 1965

All scientific names of North American mammals are given in the form used by Hall (1981). The entries in the synopsis are organized in accordance with the format used by Margolis and Arthur (1979) in their *Synopsis of the Parasites of Fishes of Canada*.

The Parasite-Host List is organized by higher taxa of ectoparasite in the following order: Acari, Coleoptera, Diptera, Hemiptera, Mallophaga, Siphonaptera, and Siphunculata. Species, genera, and family names are listed in alphabetical order within their respective next higher taxon, which in the case of a family is either a suborder or an order, depending on the group in question and the usefulness of including the suborder or order category.

For each parasite species listed, the following information is provided:

- 1) The current *scientific name*, including author(s) and date(s), followed by any recognized synonyms that were used in establishing the Canadian record(s). No attempt was made to evaluate systematically the validity of pub-

lished records, but attention is drawn to obvious errors.

- 2) The *site* of occurrence of the ectoparasite on its host(s) is assumed to be the skin for the Acari, Coleoptera, Hemiptera, Mallophaga, Siphonaptera, and Siphunculata. The larval stages of the Diptera are usually found in subcutaneous tissues or air passages of their hosts. Comments on additional sites, or aberrant sites are given in the remarks section.
- 3) The *hosts*. Numbers in parentheses after each host name correspond with the numbers assigned to the references establishing the particular parasite-host records. Holland (1984) corrected some host identifications for the Siphonaptera made by previous authors. For the most part we have used Holland's corrections. For example, Wagner (1936a) recorded *Foxella ignota recula* from *Mustela suturata*. Holland's correction for this host is *Mustela frenata nevadensis*.
- 4) *Distribution (Dist.)* Species distribution is indicated by provincial or territory boundaries listed in alphabetical order as follows: Alta (Alberta), BC (British Columbia), Man (Manitoba), NB (New Brunswick), Nfld (Newfoundland), NS (Nova Scotia), NWT (Northwest Territories), Ont (Ontario), PEI (Prince Edward Island), Que (Quebec), Sask (Saskatchewan), and YT (Yukon Territory).
- 5) Authors responsible for the published *records* are listed in chronological order. To enable the reader to grasp at a glance the author(s) responsible for particular parasite-locality records, we numbered the references listed under "Records" and placed the corresponding number(s) after the host name, and each reference is followed by the locality or localities from which the parasite was (were) reported. When only one host is listed for a particular parasite, the references are not numbered, and when all records are from the same locality, the latter was not listed after the authors' names.
- 6) Under *remarks*, explanatory comments, as required, are offered on systematics, nomenclature, misidentifications, and synonyms of parasites; and on the hosts, sites on or within hosts, and validity of previous records.

In the Host-Parasite List, within each order, the families, genera, and species are listed alphabetically. After the name of each parasite species, its geographic distribution on the host in question is given in parentheses.

The REFERENCES are given in two parts, the first includes those directly referred to in the text, and the second, SUPPLEMENTARY REFERENCES, contains a list of publications dealing with various aspects of parasites of wild mammals of Canada but which do not contain original parasite-host records.

To facilitate access to information in the parasite-host and host-parasite lists, the publication concludes with an INDEX to parasite and host scientific names.

Obviously a book of this sort is bound to have errors and ambiguities, and certainly such faults are our responsibility. We hope readers will bring them to our attention. We also hope that colleagues will send us reprints of their current work or papers we missed so that these additions or correc-



tions can be included in future revisions of the synopsis.

In a sense, this book constitutes a plea and encouragement for more work on our poorly known parasite fauna. We hope this synopsis will kindle interest and raise questions in the minds of future investigators in parasitology.

The compiled information covers the period from 1870 to December, 1987, and was extracted from various publications in the primary scientific literature (mostly in English) such as The Canadian Zoologist, Canadian Journal of Zoology, Journal of Wildlife Diseases and the Journal of Parasitology, as well as their foreign counterparts. Parasitology was searched in their original language and translated into English. The original language was retained and provided parenthetically and in a separate column. The original language was not searched separately, hence some existing records may have been missed.

In general, whenever there was any doubt as to the status of a record, it was based on original records, but retaining all records in their original language of publication. Records based on the same material were considered as duplicates and not given original publication status. Publications that do not provide original publication information were not listed with some reports of Canadian distribution records but listed with some reports of occurrence as compiled in a supplementary list of references. References dealing only with experimental studies, as well as references collected from the general press or journals, with specimens collected from the general press or from field courses are generally not included. It was noted that a total was added to the taxonomic section.

The synopsis indicates that up to December, 1987, at least 322 species of ectoparasites have been reported from 122 species of terrestrial mammals. Parasites not identified to the species level are not included in the total number. The 22 species are divided among seven major taxa as follows: Acari - 122; Coleoptera - 4; Diptera - 19; Hemiptera - 1; Mallophaga - 19; Siphonurans - 74; and Siphonurans - 23.

The taxonomic arrangement adopted for each major taxonomic group of ectoparasites included in Canadian records in most cases is as follows:

- Acari - Karsten 1978
- Coleoptera - Armit 1958
- Diptera - Armit et al. 1980
- Mallophaga - Everson 1975
- Siphonurans - Howell 1984
- Siphonurans - Siphonurans and Pratt 1952

All scientific names of North American mammals are given in the form used by Hall (1981). The names of the synopsis are given in accordance with the format used by Hargrett and Armit (1979) in their Synopsis of the Parasites of Fauna of Canada.

The Parasites-Host List is organized by eight taxa in ascending order of the following ranks: Acari, Coleoptera, Diptera, Hemiptera, Mallophaga, Siphonurans, and Siphonurans. Species names are listed in alphabetical order within their respective rank either alone, when the case of a family is other a suborder or an order, depending on the group in question and the necessity of including the suborder or order category.

For each parasitic species listed, the following information is provided:

- 1) The current scientific name, including authority and date(s), followed by any nomenclature changes that have been made to enhance systematicity, the authority of publication and including the Canadian records of the original date(s), followed by any nomenclature changes that have been made to enhance systematicity, the authority of publication and including the Canadian records of the original date(s).



# PHYLUM CHELICERATA

## CLASS ARACHNIDA

### SUBCLASS ACARI

#### ORDER ACARIDIDA

##### Family GLYCYPHAGIDAE

###### *Dermacarus hylandi* Fain, 1969

Syn.: *Radfordia hylandi*

Hosts: *Microtus chrotorrhinus*

*M. pennsylvanicus*

*Synaptomys borealis*

*S. cooperi*

*Tamias striatus*

Dist.: NB

Record: Whitaker and French 1982

###### *Dermacarus hypudaei* (Koch, 1941)

Host: *Napaeozapus insignis*

Dist.: NS

Record: Wright 1979

###### *Dermacarus hypudaei septentrionalis* (Koch, 1941)

Hosts: *Clethrionomys gapperi*

*Tamiasciurus hudsonicus*

Dist.: Que

Record: Gyorkos and Hilton 1982

###### *Dermacarus jonesi* Fain and Whitaker, 1976

Host: *Peromyscus maniculatus*

Dist.: BC

Record: Fain and Whitaker 1976

###### *Dermacarus newyorkensis* Fain, 1969

Hosts: *Napaeozapus insignis* (2, 3)

*Tamiasciurus hudsonicus* (1)

*Zapus hudsonius* (2, 3)

Dist.: NB, NS, PEI, Que

Records: 1. Gyorkos and Hilton 1982 (Que); 2.

Jones and Thomas 1982 (NB, NS, PEI); 3.

Whitaker and French 1982 (NB)

###### *Dermacarus ondatrae* Rupes and Whitaker, 1968

Host: *Ondatra zibethicus*

Dist.: Man, NS

Records: McKenzie and Welch 1979 (Man);

Wright 1979 (NS)

###### *Dermacarus sciurinus* (Koch)

Host: *Tamiasciurus hudsonicus*

Dist.: Que

Record: Gyorkos and Hilton 1982

###### *Dermacarus validus* (Banks)

Host: *Ondatra zibethicus osoyoosensis*

Dist.: BC

Record: Knight 1951

###### *Dermacarus* sp.

Host: *Peromyscus maniculatus*

Dist.: NB

Record: Whitaker and French 1982

###### *Glycyphagus hypudaei* (Koch, 1941)

Hosts: *Clethrionomys gapperi*

*Condylura cristata*

*Microtus chrotorrhinus*

*M. pennsylvanicus*

*Napaeozapus insignis*

*Peromyscus maniculatus*

*Sorex fumeus*

*S. gaspensis*

*S. palustris*

*Synaptomys borealis*

*S. cooperi*

Dist.: NB

Record: Whitaker and French 1982

###### *Orycterixenus canadensis* Fain, Kok, Lukoschus and Clulow, 1971

Hosts: *Condylura cristata*

*Microsorex hoyi*

*Microtus chrotorrhinus*

Dist.: NB

Record: Whitaker and French 1982

###### *Orycterixenus soricis* Oudemans, 1915

Hosts: *Blarina brevicauda* (2)

*Condylura cristata* (2)

*Microsorex hoyi* (2)

*Microtus chrotorrhinus* (2)

*Sorex cinereus* (2)

*S. fumeus* (2)

*S. gaspensis* (2)

*S. palustris* (2)

*Synaptomys borealis* (2)

*Zapus hudsonius* (1)

Dist.: NB, NS

Records: 1. Jones and Thomas 1982 (NS); 2.

Whitaker and French 1982 (NB)

###### *Xenoryctes latiporus* Fain and Whitaker, 1979

Hosts: *Blarina brevicauda*

*Zapus hudsonius*

Dist.: NB

Record: Whitaker and French 1982

###### *Xenoryctes nudus* Fain and Whitaker, 1975

Hosts: *Condylura cristata*

*Sorex fumeus*

Dist.: NB

Record: Whitaker and French 1982

##### Unidentified Glycyphagidae

##### Glycyphagidae gen. spp.

Hosts: *Clethrionomys gapperi*

*Microtus pennsylvanicus*

*Peromyscus maniculatus*

*Sorex cinereus*

*S. palustris*

*Tamiasciurus hudsonicus*

Dist.: Ont

Record: Scholten et al. 1962

Family LISTROPHORIDAE

- Listrophorus americanus* Radford, 1944  
Hosts: *Ondatra zibethicus* (2)  
*O. z. osoyoosensis* (1)  
Dist.: BC, Man  
Records: 1. Knight 1951 (BC); 2. McKenzie and Welch 1979 (Man)
- Listrophorus dicrostonyx* Fain and Hyland, 1972  
Host: *Dicrostonyx* sp.  
Dist.: NWT  
Record: Fain and Hyland 1974
- Listrophorus leuckarti* Pagenstecher, 1861  
Host: *Microtus p. pennsylvanicus*  
Dist.: Ont  
Record: McDaniel et al. 1967
- Listrophorus mexicanus* Fain, 1970  
Hosts: *Clethrionomys gapperi* (1, 3)  
*Microtus chrotorrhinus* (3)  
*M. pennsylvanicus* (3)  
*Napaeozapus insignis* (2)  
*Synaptomys cooperi* (3)  
*Zapus hudsonius* (2)  
Dist.: NB, NS, PEI, Que  
Records: 1. Gyorkos and Hilton 1982 (Que); 2. Jones and Thomas 1982 (NS, PEI, Que); 3. Whitaker and French 1982 (NB)
- Listrophorus mexicanus squamiferus* Fain and Hyland, 1972  
Host: *Microtus pennsylvanicus*  
Dist.: NWT  
Record: Fain and Hyland 1974
- Listrophorus ondatrae* Fain, Kok, and Lukoschus, 1970  
Host: *Ondatra zibethicus*  
Dist.: NWT  
Record: Fain 1970
- Listrophorus phenacomys* Fain and Hyland, 1972  
Hosts: *Phenacomys intermedius*  
*Phenacomys* sp.  
Dist.: Man, NWT  
Record: Fain and Hyland 1974
- Listrophorus synaptomys* (Fain, Whitaker, McDaniel, and Lukoschus)  
Hosts: *Synaptomys borealis*  
*S. cooperi*  
Dist.: NB  
Record: Whitaker and French 1982
- Listrophorus validus* Banks, 1909  
Host: *Ondatra zibethicus*  
Dist.: Ont  
Records: Banks 1909; Jarvis 1910
- Listrophorus* spp.  
Host: *Blarina brevicauda*  
Dist.: Ont  
Record: Jameson 1950

- Lynxacarus mustelae* (Megnin, 1885) Fain and Hyland, 1974  
Syn.: *Listrophorus mustelae* Megnin, 1885  
Host: *Martes americana abietinoides*  
Dist.: BC  
Record: Cowan 1955

- Prolabidocarpus canadensis* Lawrence, 1948  
Host: *Castor canadensis*  
Dist.: Ont  
Record: Lawrence 1948

Unidentified Listrophoridae

- Listrophoridae gen. spp.  
Hosts: *Clethrionomys gapperi*  
*Microtus pennsylvanicus*  
Dist.: Ont  
Record: Scholten et al. 1962

Family MYOCOPTIDAE

- Gliricoptes zapus* Fain and Whitaker, 1974  
Host: *Napaeozapus insignis*  
Dist.: NB  
Record: Whitaker and French 1982

- Gliricoptes* spp.  
Hosts: *Napaeozapus insignis*  
*Tamiasciurus hudsonicus*  
Dist.: Que  
Record: Gyorkos and Hilton 1982  
Remarks: Gyorkos and Hilton's (1982) specimens were near *G. glirinus* (Canestrini).

- Myocoptes japonensis canadensis* Radford, 1955  
Syn.: *Myocoptes canadensis* Radford, 1955  
Host: *Dicrostonyx* spp.  
Dist.: Ont  
Record: Radford 1955

- Myocoptes japonensis japonensis* Radford, 1955  
Hosts: *Clethrionomys gapperi*  
*Microtus chrotorrhinus*  
*M. pennsylvanicus*  
Dist.: NB  
Record: Whitaker and French 1982

- Myocoptes squamosus* Fain, Munting, and Lukoschus, 1969  
Hosts: *Clethrionomys gapperi*  
*Microtus chrotorrhinus*  
*M. pennsylvanicus*  
Dist.: NB  
Record: Whitaker and French 1982

- Myocoptes* spp.  
Hosts: *Blarina brevicauda* (1)  
*Clethrionomys gapperi* (3)  
*C. rutilus* (2)  
*Peromyscus maniculatus* (3)  
*Tamias striatus* (3)  
Dist.: NWT, Ont, Que  
Records: 1. Jameson 1950 (Ont); 2. Mitchell and Behn 1965 (NWT); 3. Gyorkos and Hilton 1982 (Que)

Remarks: Gyorkos and Hilton (1982) noted that their specimens from *P. maniculatus* were near *Myocoptes musculus*; those from *C. gapperi* were near *M. ondatrae*; and those from *T. striatus*, and some from *C. gapperi*, were immature.

*Trichoecius tenax* (Michael, 1889) Fain, Munting, and Lukoschus, 1969

Syn.: *Myocoptes tenax* Michael, 1889

Hosts: *Clethrionomys gapperi*  
*Microtus chrotorrhinus*  
*M. pennsylvanicus*

Dist.: NB

Record: Whitaker and French 1982

*Trichoecius* spp.

Hosts: *Microtus chrotorrhinus*  
*Peromyscus maniculatus*

Dist.: NB

Record: Whitaker and French 1982

#### Family PSOROPTIDAE

*Chorioptes texanus* Hirst, 1924

Host: *Rangifer tarandus*

Dist.: NWT

Record: Sweatman 1958a

*Otodectes cynotis* (Hering, 1838) Canestrini, 1894

Hosts: *Odocoileus virginianus*  
*Vulpes vulpes*

Dist.: Alta, Que

Record: Sweatman 1958b

Remarks: The mites were recovered from the ear canal.

*Psoroptes ovis* (Hering, 1838)

Host: *Ovis canadensis*

Dist.: Alta

Record: Cowan 1944

#### Family SARCOPTIDAE

*Sarcoptes scabiei* (Linnaeus, 1758)

Hosts: *Canis latrans*

*C. lupus*

*Vulpes vulpes*

Dist.: Alta

Record: Samuel 1981

Unidentified Sarcoptidae

Sarcoptidae gen. spp.

Hosts: *Clethrionomys gapperi*

*Tamias striatus*

Dist.: Ont

Record: Scholten et al. 1962

### SUBORDER ACTINEDIDA

#### Family CHEYLETIDAE

*Cheyletiella parasitivorax* (Megnin, 1878)

Host: *Lepus americanus*

Dist.: Ont

Record: Cooper 1946

#### Family MYOBIIDAE

*Amorphacarus hengererorum* Jameson, 1948

Hosts: *Blarina brevicauda*

*Microsorex hoyi*

*Sorex cinereus*

*S. fumeus*

*S. gaspensis*

*S. palustris*

Dist.: NB

Record: Whitaker and French 1982

*Blarinobia simplex* (Ewing, 1938)

Syn.: *Myobia simplex* Ewing, 1938

Host: *Blarina brevicauda*

Dist.: NB, Ont

Records: 1. Jameson 1948 (Ont), 2. 1950 (Ont);

3. Whitaker and French 1982 (NB)

*Eadidea condylurae* Jameson, 1949

Host: *Condylura cristata*

Dist.: NB

Record: Whitaker and French 1982

*Myobia caudata* Banks, 1909

Host: Little brown bat

Dist.: Ont

Record: 1. Banks 1909; 2. Jarvis 1910;

*Myobia musculi* (Schrank, 1781)

Host: House mouse

Dist.: Ont

Record: Jarvis 1910

*Myobia* spp.

Hosts: *Clethrionomys gapperi* (3)

*Microtus pennsylvanicus* (3)

*Napaeozapus insignis* (3)

*Peromyscus maniculatus* (3)

*Peromyscus* spp. (1)

*Sorex cinereus* (2)

Dist.: BC, NS, Que

Records: 1. Spencer 1940 (BC); 2. Wright 1979

(NS); 3. Gyorkos and Hilton 1982 (Que)

*Protomyobia americana* McDaniel, 1967

Hosts: *Blarina brevicauda*

*Microsorex hoyi*

Dist.: NB

Record: Whitaker and French 1982

*Protomyobia brevisetosa* Jameson, 1948

Hosts: *Microtus pennsylvanicus*

*Sorex fumeus*

Dist.: NB

Record: Whitaker and French 1982

*Protomyobia claparedei* (Poppe, 1896)

Hosts: *Blarina brevicauda* (1, 2)

*Sorex cinereus* (3)

*S. palustris* (3)

Dist.: NB, Ont

Records: 1. Jameson 1948 (Ont), 2. 1950 (Ont);

3. Whitaker and French 1982 (NB)



*Radfordia ewingi* (Fox, 1937)  
Hosts: *Napaeozapus insignis* (1, 2)  
*Zapus hudsonius* (1)  
Dist.: NB, PEI  
Records: 1. Jones and Thomas 1982 (NB, PEI);  
2. Whitaker and French 1982 (NB)

*Radfordia lemnina* (Koch, 1841)  
Host: *Clethrionomys gapperi*  
Dist.: NB  
Record: Whitaker and French 1982

*Radfordia subuliger* Ewing, 1938  
Hosts: *Peromyscus maniculatus* (2)  
*P. m. austerus* (1)  
Dist.: BC, NB  
Records: 1. Spencer 1940 (BC); 2. Whitaker  
and French 1982 (NB)

*Radfordia* spp.  
Hosts: *Clethrionomys gapperi* (3)  
*Microtus chrotorrhinus* (4)  
*M. pennsylvanicus* (3)  
*Ondatra zibethicus osoyoosensis* (2)  
*Peromyscus maniculatus* (3)  
*Rattus norvegicus* (1)  
Dist.: BC, NB, Que  
Records: 1. Firlotte 1948 (Que); 2. Knight 1951  
(BC); 3. Gyorkos and Hilton 1982 (Que); 4.  
Whitaker and French 1982 (NB)

Remarks: Knight's (1951) specimens closely  
resembled *R. lemnina*. The *Radfordia* sp. from  
*C. gapperi* and *M. pennsylvanicus* was close to  
*R. lemnina*; those from *P. maniculatus* were  
immature (Gyorkos and Hilton 1982).

#### Unidentified Myobiidae

Myobiidae gen. spp.  
Hosts: *Blarina brevicauda*  
*Clethrionomys gapperi*  
*Microtus pennsylvanicus*  
*Mus musculus*  
*Peromyscus maniculatus*  
*Sorex cinereus*  
*Zapus hudsonius*  
Dist.: Ont  
Record: Scholten et al. 1962

#### Family PSORERGATIDAE

*Psorergates canadensis* Kok, Lukoschus, and Clulow,  
1971  
Host: *Microtus pennsylvanicus*  
Dist.: Man, Ont  
Record: Kok et al. 1971  
Remarks: The specimens were found only in  
the ear concha and on the hind legs.

*Psorergates cinereus* Kok, Lukoschus, and Clulow,  
1971  
Host: *Sorex cinereus*  
Dist.: Man, Ont  
Record: Kok et al. 1971

Remarks: The specimens were found only in  
the ear concha and on the hind legs.

*Psorergates simplex* Tyrrell, 1883  
Host: Mouse  
Dist.: unspecified  
Record: Tyrrell 1883  
Remarks: Found in the ear.

*Psorergates watsoni* Kok, Lukoschus, and Clulow,  
1971  
Host: *Peromyscus maniculatus*  
Dist.: Ont  
Record: Kok et al. 1971  
Remarks: The specimens were found only in  
the ear concha and on the hind legs.

*Psorergates* spp.  
Hosts: Field mouse  
House mouse  
Dist.: Ont  
Record: Jarvis 1910

*Psorobia castoris* Kok, Lukoschus, and Clulow, 1970  
Host: *Castor canadensis*  
Dist.: Ont  
Record: Kok et al. 1970

#### Family PYGMEPHORIDAE

*Bakerdania* spp.  
Hosts: *Blarina brevicauda*  
*Microsorex hoyi*  
*Microtus chrotorrhinus*  
*Peromyscus maniculatus*  
*Sorex cinereus*  
*S. fumeus*  
*S. gaspensis*  
*Synaptomys cooperi*  
Dist.: NB  
Record: Whitaker and French 1982

*Pygmephorus horridus* Mahunka, 1973  
Hosts: *Blarina brevicauda*  
*Clethrionomys gapperi*  
*Condylura cristata*  
*Microsorex hoyi*  
*Microtus chrotorrhinus*  
*Napaeozapus insignis*  
*Sorex cinereus*  
*S. fumeus*  
*S. gaspensis*  
*S. palustris*  
*Synaptomys borealis*  
*S. cooperi*

Dist.: NB  
Record: Whitaker and French 1982

*Pygmephorus johnstoni* Smiley and Whitaker, 1979  
Host: *Blarina brevicauda*  
Dist.: NB  
Record: Whitaker and French 1982

- Pygmephorus lutterloughae* Smiley and Whitaker, 1979  
 Hosts: *Blarina brevicauda*  
*Condylura cristata*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Pygmephorus mahunkai* Smiley and Whitaker, 1979  
 Hosts: *Myotis lucifugus* (2)  
*Napaeozapus insignis* (1)  
*Zapus hudsonius* (1)  
 Dist.: NS, PEI  
 Records: 1. Jones and Thomas 1982 (NS, PEI),  
 2. 1983 (PEI)
- Pygmephorus moreohorridus* Mahunka, 1975  
 Hosts: *Blarina brevicauda*  
*Condylura cristata*  
*Microsorex hoyi*  
*Microtus pennsylvanicus*  
*Sorex cinereus*  
*S. fumeus*  
*S. gaspensis*  
*S. palustris*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Pygmephorus nidicolus* Mahunka, 1969  
 Hosts: *Blarina brevicauda*  
*Sorex gaspensis*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Pygmephorus whitakeri*, Mahunka, 1973  
 Hosts: *Blarina brevicauda*  
*Sorex cinereus*  
*S. fumeus*  
*S. gaspensis*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Pygmephorus* spp.  
 Hosts: *Blarina brevicauda* (2)  
*Dicrostonyx groenlandicus* (1)  
*Sorex fumeus* (2)  
 Dist.: NB, NWT  
 Records: 1. McAlpine 1965 (NWT); 2.  
 Whitaker and French 1982 (NB)
- Family TROMBICULIDAE
- Comatacarus americanus* Ewing, 1942  
 Host: *Blarina brevicauda*  
 Dist.: Ont  
 Record: Jameson 1950
- Euschoengastia blarinae* (Ewing, 1931)  
 Hosts: *Blarina brevicauda* (1)  
*Clethrionomys gapperi* (2)  
*Microtus chrotorrhinus* (2)  
*Sorex cinereus* (1)  
*S. fumeus* (1)  
 Dist.: NB, Ont  
 Record: 1. Jameson 1950 (Ont); 2. Whitaker  
 and French 1982 (NB)
- Euschoengastia setosa* (Ewing, 1937)  
 Hosts: *Microtus chrotorrhinus* (2)  
*Peromyscus maniculatus* (2)  
*Tamias striatus* (1)  
 Dist.: NB, Que  
 Record: 1. Gyorkos and Hilton 1982 (Que); 2.  
 Whitaker and French 1982 (NB)
- Euschoengastia* spp.  
 Hosts: *Clethrionomys gapperi* (2)  
*Microtus pennsylvanicus* (1, 2)  
 Dist.: NS, Sask  
 Records: 1. Wilson 1967 (Sask); 2. Wright 1979  
 (NS)  
 Remarks: Wilson (1967) stated that his material  
 was close to *E. campi* Brown and Brennan and  
*E. sciuricola* (Ewing).
- Eutrombicula harperi* Ewing, 1928  
 Host: *Ondatra zibethicus osoyoosensis*  
 Dist.: BC  
 Record: Knight 1951
- Miyatrombicula esoensis* Sasa and Ogata, 1953  
 Hosts: *Blarina brevicauda* (2)  
*Clethrionomys gapperi* (2)  
*Microsorex hoyi* (2)  
*Microtus chrotorrhinus* (2)  
*M. pennsylvanicus* (2)  
*Napaeozapus insignis* (1, 2)  
*Peromyscus maniculatus* (2)  
*Sorex cinereus* (2)  
*S. fumeus* (2)  
*S. gaspensis* (2)  
*S. palustris* (2)  
*Synaptomys borealis* (2)  
*S. cooperi* (2)  
*Tamias striatus* (2)  
 Dist.: NB, PEI  
 Records: 1. Jones and Thomas 1982 (PEI); 2.  
 Whitaker and French 1982 (NB)
- Neotrombicula basignata* (Hirst, 1925)  
 Hosts: *Lepus americanus*  
*Microtus pennsylvanicus*  
 Dist.: NS  
 Record: Wright 1979
- Neotrombicula harperi* (Ewing, 1928)  
 Hosts: *Clethrionomys gapperi* (2)  
*Microtus chrotorrhinus* (2)  
*M. pennsylvanicus* (2)  
*Napaeozapus insignis* (1, 2)  
*Sorex cinereus* (2)  
*Synaptomys cooperi* (2)  
*Tamias striatus* (2)  
*Zapus hudsonius* (1)  
 Dist.: NB, NS, PEI, Que  
 Records: 1. Jones and Thomas 1982 (NB, NS,  
 PEI, Que); 2. Whitaker and French 1982 (NB)
- Neotrombicula lipovskyi* Brennan and Wharton, 1950  
 Host: *Zapus hudsonius*  
 Dist.: NB  
 Record: Jones and Thomas 1982

*Neotrombicula microti* (Ewing, 1928)

Hosts: *Blarina brevicauda* (1)  
*Clethrionomys gapperi* (1, 3)  
*Microtus pennsylvanicus* (1)  
*Napaeozapus insignis* (1, 2)  
*Ondatra zibethicus* (1)  
*Peromyscus leucopus* (1)  
*Tamiasciurus hudsonicus* (1)  
*Zapus hudsonius* (1)

Dist.: NB, NS, Que

Records: 1. Wright 1979 (NS); 2. Jones and Thomas 1982 (NS, Que); 3. Whitaker and French 1982 (NB)

*Trombicula jamesoni* Brennan, 1948

Host: *Blarina brevicauda*  
Dist.: Ont  
Record: Jameson 1950

*Trombicula* spp.

Hosts: *Clethrionomys gapperi* (2, 3)  
*Peromyscus leucopus* (2)  
*P. maniculatus austerus* (1)  
*Tamiasciurus hudsonicus* (3)

Dist.: BC, NS, Que

Records: 1. Spencer 1940 (BC); 2. Wright 1979 (NS); 3. Gyorkos and Hilton 1982 (Que)

Unidentified Trombiculidae

Trombiculidae gen. spp.

Hosts: *Clethrionomys gapperi*  
*Odocoileus virginianus*  
*Peromyscus maniculatus*  
*Tamiasciurus hudsonicus*  
*Tamias striatus*  
*Zapus hudsonius*

Dist.: Ont

Record: Scholten et al. 1962

Family TROMBIDIIDAE

*Allothrombium* spp.

Host: *Microtus pennsylvanicus*  
Dist.: NS  
Record: Wright 1979

*Neoschongastia blarinae* (Ewing, 1929)

Host: Streater's red squirrel  
Dist.: BC  
Record: Spencer 1940

## ORDER PARASITIFORMES

### SUBORDER GAMASIDA

#### Family DERMANYSSIDAE

*Liponyssus montanus* (Ewing, 1923)

Hosts: *Spermophilus richardsonii*  
*S. tridecemlineatus*  
Dist.: Man  
Record: McLeod 1933

*Liponyssus occidentalis* (Ewing, 1923)

Syn.: *Ceratomyssus occidentalis* (Ewing, 1923)  
Hosts: *Myotis l. lucifugus* (2)  
*Spermophilus richardsonii* (1)  
*S. tridecemlineatus* (1)  
Bats (3)  
Dist.: BC, Man, Ont  
Record: 1. McLeod 1933 (Man); 2. Dymond 1938 (Ont); 3. Spencer 1939 (BC)

*Liponyssus* spp.

Hosts: *Condylura cristata* (1)  
Bats (2)  
Streater's red squirrel (3)

Dist.: BC, Ont

Records: 1. Jarvis 1910 (Ont); 2. Spencer 1939a (BC), 3. 1940 (Ont)

*Myonyssus jamesoni* Ewing and Baker, 1947

Hosts: *Blarina brevicauda* (1, 2)  
*Sorex fumeus* (2)  
*S. palustris* (3)

Dist.: NB, Ont

Records: 1. Ewing and Baker 1947 (Ont); 2. Jameson 1950 (Ont); 3. Whitaker and French 1982 (NB)

Remarks: Whitaker and French (1982) placed *M. jamesoni* in the family Laelapidae.

Family HALARACHNIDAE

*Pneumonyssus* spp.

Host: *Spermophilus richardsonii*  
Dist.: Alta  
Record: Hilton and Mahrt 1971

*Zumptiella bakeri* (Furman)

Host: *Tamiasciurus hudsonicus*  
Dist.: Que  
Record: Gyorkos and Hilton 1982

Family LAELAPIDAE

*Androlaelaps casalis* (Berlese, 1887)

Host: *Peromyscus maniculatus*  
Dist.: NB  
Record: Whitaker and French 1982

*Androlaelaps fahrenheitsi* (Berlese, 1911)

Syn.: *Androlaelaps glasgowi* (Ewing, 1925)  
*Atricholaelaps glasgowi* (Ewing, 1925)  
Hosts: *Blarina brevicauda* (2, 6)  
*Clethrionomys gapperi* (4, 6)  
*Condylura cristata* (6)  
*Microtus chrotorrhinus* (6)  
*M. pennsylvanicus* (3, 6)  
*M. p. pennsylvanicus* (1, 2)  
*M. pinetorum scalopsoides* (1)  
*Napaeozapus insignis* (5, 6)  
*Peromyscus maniculatus* (6)  
*Peromyscus* sp. (1)  
*Rattus norvegicus* (1)  
*Sorex fumeus* (6)  
*Synaptomys borealis* (6)



- S. cooperi* (6)  
*Zapus hudsonius* (5)  
*Z. h. ontarioensis* (1)  
 Dist.: NB, NS, Ont, PEI, Sask  
 Records: 1. Judd 1950 (Ont), 2. 1953 (Ont); 3. Wilson 1967 (Sask); 4. Wright 1979 (NS); 5. Jones and Thomas 1982 (NB, NS, PEI); 6. Whitaker and French 1982 (NB)
- Androlaelaps* spp.  
 Hosts: *Blarina brevicauda*  
*Clethrionomys gapperi*  
*Marmota monax*  
*Microtus pennsylvanicus*  
*Napaeozapus insignis*  
*Peromyscus leucopus*  
*P. maniculatus*  
*Zapus hudsonius*  
 Dist.: NS  
 Record: Wright 1979
- Echinolaelaps echidninus* (Berlese, 1887)  
 Host: *Rattus norvegicus*  
 Dist.: Que  
 Record: Firlotte 1948
- Echinonyssus blarinae*  
 Host: *Blarina brevicauda*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Echinonyssus isabellinus* (Oudemans, 1913)  
 Hosts: *Blarina brevicauda* (2)  
*Clethrionomys gapperi* (2)  
*Condylura cristata* (2)  
*Microtus chrotorrhinus* (2)  
*M. pennsylvanicus* (2)  
*Napaeozapus insignis* (1)  
*Synaptomys cooperi* (2)  
*Zapus hudsonius* (1)  
 Dist.: NB, PEI  
 Records: 1. Jones and Thomas 1982 (PEI); 2. Whitaker and French 1982 (NB)
- Echinonyssus talpae* (Zemskaya, 1955)  
 Hosts: *Blarina brevicauda*  
*Microsorex hoyi*  
*Sorex cinereus*  
*S. fumeus*  
*S. gaspensis*  
*S. palustris*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Echinonyssus* spp.  
 Host: *Clethrionomys gapperi*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Eulaelaps stabularis* (Koch, 1836)  
 Syn.: *Laelaps pedalis* Banks, 1909  
 Hosts: *Blarina brevicauda* (3, 6, 7)  
*Clethrionomys gapperi* (6, 7)  
*Condylura cristata* (7)
- Microtus chrotorrhinus* (7)  
*M. pennsylvanicus* (5, 6)  
*Peromyscus leucopus* (6)  
*P. maniculatus* (7)  
*Peromyscus* spp. (4)  
*Sorex cinereus* (5, 6)  
*Synaptomys cooperi* (7)  
 Chipmunk (1, 2)  
 Dist.: NB, NS, Ont, Sask  
 Records: 1. Banks 1909 (Ont); 2. Jarvis 1910 (Ont); 3. Jameson 1950 (Ont); 4. Judd 1950 (Ont); 5. Wilson 1967 (Sask); 6. Wright 1979 (NS); 7. Whitaker and French 1982 (NB)
- Gemasmus* spp.  
 Host: Red squirrel  
 Dist.: Ont  
 Record: Jarvis 1910
- Haemogamasus ambulans* (Thorell, 1872)  
 Syn.: *Haemogamasus alaskensis* Ewing, 1925  
 Hosts: *Blarina brevicauda* (1, 7)  
*Clethrionomys gapperi* (5, 7)  
*C. rutilus* (3)  
*Condylura cristata* (7)  
*Dicrostonyx groenlandicus* (2)  
*Eutamias minimus* (4)  
*Microsorex hoyi* (7)  
*Microtus chrotorrhinus* (7)  
*M. pennsylvanicus* (7)  
*Napaeozapus insignis* (6)  
*Sorex fumeus* (7)  
*S. gaspensis* (7)  
*S. palustris* (7)  
*Synaptomys cooperi* (7)  
*Zapus hudsonius* (6, 7)  
 Dist.: NB, NS, NWT, Ont, PEI  
 Records: 1. Jameson 1950 (Ont); 2. McAlpine 1965 (NWT); 3. Mitchell and Behn 1965 (NWT); 4. Wilson 1967 (Ont); 5. Wright 1979 (NS); 6. Jones and Thomas 1982 (NB, PEI); 7. Whitaker and French 1982 (NB)  
 Remarks: Mitchell and Behn (1965) have *Haemogamasus alaskensis* and *H. ambulans* listed as separate species.
- Haemogamasus hirsutus* Berlese, 1889  
 Host: *Zapus hudsonius ontarioensis*  
 Dist.: Ont  
 Record: Judd 1950
- Haemogamasus liponyssoides* Ewing, 1925  
 Syn.: *Euhaemogamasus liponyssoides* (Ewing, 1925)  
 Hosts: *Blarina brevicauda* (2, 3)  
*Condylura cristata* (3)  
*Microtus chrotorrhinus* (3)  
*Scapanus orarius schefferi* (1)  
*Sorex cinereus* (3)  
*S. fumeus* (3)  
*S. gaspensis* (3)  
*Synaptomys cooperi* (3)

- Mole (1)  
Dist.: BC, NB, Ont  
Records: 1. Spencer 1940 (BC); 2. Jameson 1950 (Ont); 3. Whitaker and French 1982 (NB)
- Haemogamasus longitarsus* (Banks, 1910)  
Syn.: *Euhaemogamasus microti* (Ewing, 1925)  
Host: *Blarina brevicauda*  
Dist.: Ont  
Record: Jameson 1950
- Haemogamasus reidi* Ewing, 1925  
Host: *Clethrionomys gapperi*  
Dist.: NB  
Record: Whitaker and French 1982
- Haemogamasus* spp.  
Hosts: *Blarina brevicauda*  
*Clethrionomys gapperi*  
*Condylura cristata*  
*Glaucomyss sabrinus*  
*Microtus pennsylvanicus*  
*Napaeozapus insignis*  
*Peromyscus leucopus*  
*Sorex cinereus*  
*S. palustris*  
Dist.: NS  
Record: Wright 1979
- Haemolaelaps glasgowi* (Ewing, 1925)  
Hosts: *Blarina brevicauda* (1)  
*Clethrionomys gapperi* (2)  
*Marmota monax* (3)  
*Peromyscus maniculatus* (2)  
*Tamiasciurus hudsonicus* (2)  
*Tamias striatus* (2)  
Dist.: Ont  
Records: 1. Jameson 1950; 2. Scholten et al. 1962; 3. Ko 1972b
- Hirstionyssus isabellinus* (Oudemans, 1913)  
Hosts: *Clethrionomys rutilus* (2)  
*Dicrostonyx groenlandicus* (1)  
Dist.: NWT  
Records: 1. McAlpine 1965; 2. Mitchell and Behn 1965
- Hirstionyssus occidentalis* (Ewing)  
Host: *Spermophilus richardsonii*  
Dist.: Alta  
Record: Hilton and Mahrt 1971
- Hirstionyssus talpae* Zenskaya, 1955  
Host: *Blarina brevicauda*  
Dist.: NS  
Record: Wright 1979
- Hirstionyssus* spp.  
Hosts: *Blarina brevicauda* (1, 4)  
*Clethrionomys gapperi* (4)  
*Condylura cristata* (4)  
*Mephitis mephitis* (2, 3)  
*Microtus pennsylvanicus* (3, 4)  
*Peromyscus maniculatus* (3, 4)  
*Procyon lotor* (4)
- Sorex palustris* (3)  
Dist.: NS, Ont  
Records: 1. Jameson 1950 (Ont); 2. Judd 1953 (Ont); 3. Scholten et al. 1962 (Ont); 4. Wright 1979 (NS)
- Hyperlaelaps* spp.  
Hosts: *Clethrionomys gapperi*  
*Microtus pennsylvanicus*  
*Zapus hudsonius*  
Dist.: NS  
Record: Wright 1979
- Hypoaspis* spp.  
Host: *Peromyscus leucopus*  
Dist.: NS  
Record: Wright 1979
- Laelaps alaskensis* Grant, 1947  
Hosts: *Dicrostonyx groenlandicus* (1)  
*Microtus chrotorrhinus* (3)  
*M. pennsylvanicus* (2, 3)  
*Synaptomys borealis* (3)  
*S. cooperi* (3)  
Dist.: NB, NWT, Ont  
Records: 1. McAlpine 1965 (NWT); 2. Wilson 1967 (Ont); 3. Whitaker and French 1982 (NB)
- Laelaps clethrionomydis* Lange, 1955  
Host: *Clethrionomys rutilus*  
Dist.: NWT  
Record: Mitchell and Behn 1965
- Laelaps kochi* Oudemans, 1936  
Syn.: *Laelaps microti* (Ewing, 1933)  
*Tetragnyssus microti* Ewing, 1933  
Hosts: *Blarina brevicauda* (1)  
*Clethrionomys gapperi* (5)  
*Glaucomyss sabrinus* (5)  
*Microtus chrotorrhinus* (7)  
*M. pennsylvanicus* (5, 7)  
*M. p. pennsylvanicus* (2, 3, 4)  
*Napaeozapus insignis* (6)  
*Synaptomys cooperi* (7)  
Dist.: NB, NS, Ont, PEI  
Records: 1. Jameson 1950 (Ont); 2. Judd 1950 (Ont), 3. 1953 (Ont), 4. 1954a (Ont); 5. Scholten et al. 1962 (Ont); 6. Jones and Thomas 1982 (NS, PEI); 7. Whitaker and French 1982 (NB)
- Laelaps multispinosus* Banks, 1909  
Syn.: *Ondatra laelaps multispinosa* (Banks, 1910)  
Hosts: *Ondatra zibethicus* (1, 2, 4, 5)  
*O. z. osoyoosensis* (3)  
Dist.: BC, Man, NS, Ont  
Records: 1. Banks 1909 (Ont); 2. Jarvis 1910 (Ont); 3. Knight 1951 (BC); 4. McKenzie and Welch 1979 (Man); 5. Wright 1979 (NS)
- Laelaps muris* (Ljungh, 1799)  
Hosts: *Microtus p. pennsylvanicus* (1, 2, 3)  
*Ondatra z. zibethicus* (1)  
Dist.: Ont  
Records: 1. Judd 1950, 2. 1953, 3. 1954a

Remarks: Records of *L. muris* by Judd (1950, 1953, 1954a) probably belong to *L. alaskensis* (Wilson 1967).

*Laelaps propheticus* Banks, 1909

Host: Groundhog

Dist.: Ont

Records: Banks 1909; Jarvis 1910

*Laelaps* spp.

Hosts: *Clethrionomys gapperi* (3)

*Microtus pennsylvanicus* (3)

*Ondatra zibethicus* (1)

*Rattus norvegicus* (2)

Dist.: BC, NS, Que

Records: 1. Spencer 1940 (BC); 2. Firlotte 1948 (Que); 3. Wright 1979 (NS)

*Laelaspis* spp.

Host: *Zapus hudsonius*

Dist.: NS

Record: Wright 1979

*Ololaelaps* spp.

Hosts: *Microtus pennsylvanicus*

*Zapus hudsonius*

Dist.: NS

Record: Wright 1979

Family MACRONYSSIDAE

*Macronyssus crosbyi* (Ewing and Stover, 1915)

Hosts: *Clethrionomys gapperi* (1)

*Myotis lucifugus* (2)

*Myotis* spp. (1)

Dist.: NS, PEI

Records: 1. Wright 1979 (NS); 2. Jones and Thomas 1983 (PEI)

*Ornithonyssus bacoti* (Hirst, 1913)

Syn.: *Liponyssus bacoti* Hirst, 1913

Hosts: *Rattus norvegicus* (1, 2, 3)

*Rattus rattus* (3)

Dist.: BC

Records: 1. Spencer 1937, 2. 1939b, 3. 1940

*Steatonyssus occidentalis* (Ewing, 1933) Whitaker and Wilson, 1974

Syn.: *Caratonyssus occidentalis* Ewing, 1933

Hosts: *Myotis l. lucifugus* (1)

Bats (2)

Dist.: BC, Ont

Records: 1. Dymond 1938 (Ont); 2. Spencer 1939a (BC)

Family OLOGAMASIDAE

*Cyrtolaelaps* spp.

Hosts: *Blarina brevicauda*

*Clethrionomys gapperi*

*Condylura cristata*

*Microsorex hoyi*

*Microtus chrotorrhinus*

*Peromyscus maniculatus*

*Sorex cinereus*

*S. fumeus*

*S. gaspensis*

*S. palustris*

Dist.: NB

Record: Whitaker and French 1982

*Euryparasitus* spp.

Hosts: *Blarina brevicauda*

*Condylura cristata*

*Microtus chrotorrhinus*

*M. pennsylvanicus*

*Napaeozapus insignis*

*Sorex cinereus*

*S. fumeus*

*S. gaspensis*

*Synaptomys borealis*

*S. cooperi*

Dist.: NB

Record: Whitaker and French 1982

Family SPINTURNICIDAE

*Spinturnix americanus* (Banks, 1902)

Host: *Myotis lucifugus*

Dist.: PEI

Record: Jones and Thomas 1983

*Spinturnix globosus* (Rudnick, 1960) Domrow, 1972

Syn.: *Paraspinturnix globosus* Rudnick, 1960

Host: *Myotis lucifugus*

Dist.: Alta

Record: Smith 1981

Remarks: The mites were collected in and around the orifice of the bats (Smith 1981).

*Spinturnix* spp.

Hosts: *Eptesicus fuscus* (4)

*Myotis l. lucifugus* (1)

*Myotis* spp. (5)

Bats (2, 3)

Dist.: BC, NS, Ont

Records: 1. Dymond 1938 (Ont); 2. Spencer 1939a (BC), 3. 1940 (BC); 4. Judd 1953 (Ont); 5. Wright 1979 (NS)

SUBORDER IXODIDA

Family ARGASIDAE

*Ornithodoros kelleyi* Cooley and Kohls, 1941

Host: Bats

Dist.: Alta, Sask

Record: Wilkinson et al. 1981

Remarks: The specimens were collected from bat-inhabited buildings (Wilkinson et al. 1980).

*Ornithodoros* spp.

Host: *Eumops perotis californicus*

Dist.: BC

Record: Spencer 1939a



*Otobius megnini* (Duges, 1884) Banks, 1912

Syn.: *Ornithodoros megnini* Duges, 1884

Hosts: *Cervus elaphus* (6)

*Odocoileus hemionus* (5, 6)

*O. virginianus* (6)

*Oreamnos americanus* (3, 5, 6, 7)

*Ovis canadensis* (5, 6, 7)

*O. c. californiana* (8)

Jack rabbit (2)

Rabbit (1)

Dist.: Alta, BC, Man

Records: 1. Hadwen 1913 (Alta); 2. Hewitt 1915 (Alta); 3. Cowan 1944 (Alta); 4. MacNay 1952 (BC); 5. Gregson 1953 (BC); 6. Rich 1957 (BC); 7. MacNay 1958 (BC); 8. Blood 1963 (BC)

Remarks: Brown and Kohls (1950) refer to Hadwen's (1913) specimens as *Otobius lagophilus* Cooley and Kohls.

#### Family IXODIDAE

*Dermacentor albipictus* (Packard, 1869) Banks, 1907

Hosts: *Alces alces* (1, 2, 3, 6, 7, 9, 10, 12, 13, 14, 16, 21, 22, 23, 25, 26, 27)

*Canis latrans* (5, 20)

*Cervus elaphus* (2, 3, 6, 14, 18)

*Odocoileus hemionus* (3, 5, 6, 24)

*O. h. columbianus* (8)

*O. h. hemionus* (4, 6, 20)

*O. virginianus* (21, 23, 24)

*Oreamnos americanus* (17)

*Ovis canadensis* (6)

*O. c. californiana* (15)

*Rangifer tarandus caribou* (19)

Coast deer (5)

Deer (7, 11, 12, 14)

Dist.: Alta, BC, Man, NB, NS, Ont, Que, Sask

Records: 1. Jarvis 1910 (Ont); 2. Hewitt 1915 (BC, Man, Que); 3. Cameron and Fulton 1927 (Sask); 4. Buckell 1934 (BC); 5. Hearle 1938 (BC); 6. Cowan 1944 (Alta); 7. Bequaert 1945 (NB, NS, Ont); 8. Cowan 1946 (BC); 9. Brown and Kohls 1950 (Alta); 10. Peterson 1955 (Que); 11. Banfield 1956 (Alta); 12. Gregson 1958 (BC); 13. Ritcey and Edwards 1958 (BC); 14. Stelfox 1962 (Alta); 15. Blood 1963 (BC); 16. Fyvie 1966 (Ont); 17. Kerr and Holmes 1966 (Alta); 18. Flook and Stenton 1969 (Alta, BC); 19. Martell et al. 1969 (NS); 20. Wilkinson 1970 (BC); 21. Addison et al. 1979 (Ont); 22. Samuel and Barker 1979 (Alta); 23. Wright 1979 (NS); 24. Samuel et al. 1980 (Alta); 25. Timmerman and Lankester 1980 (Ont); 26. Drew and Samuel 1985 (Alta), 27. 1986 (Alta)

Remarks: Cameron and Fulton (1927) reported *Alces machlis* and *Cervus canadensis* as hosts to *D. albipictus*. These hosts are recorded here as *Alces alces* and *Cervus elaphus*, respectively. Buckell (1934) presumed the nymphs he collected were *D. albipictus*.

*Dermacentor andersoni* Stiles, 1908

Syn.: *Dermacentor venustus* Marx in Neumann, 1897

Hosts: *Alces alces* (12, 13, 18)

*A. a. andersoni* (17)

*Antilocapra a. americana* (17)

*Canis latrans* (7)

*Cervus elaphus* (13)

*Erethizon dorsatum nigriscens* (17)

*E. d. epixanthium* (17)

*Erethizon* sp. (12)

*Lepus townsendii campanius* (7)

*Marmota caligata* (17)

*M. flaviventris avara* (6, 12)

*M. monax* (17, 18)

*Marmota* sp. (7)

*Mephitis mephitis* (17)

*Mustela frenata nevadensis* (17)

*M. putorius* (lab animal) (17)

*Neotoma c. cinerea* (16)

*Odocoileus hemionus* (1, 5, 6, 9)

*O. h. hemionus* (12, 14, 17)

*Oreamnos americanus* (4, 9, 15, 19)

*O. a. missoulae* (12)

*Ovis canadensis* (1, 7, 8, 11)

*O. c. canadensis* (12)

*Spermophilus columbianus* (5, 11)

*S. c. columbianus* (12)

*S. richardsonii* (7)

*Spermophilus* spp. (3)

*Taxidea t. taxus* (17)

*Ursus arctos* (1, 5)

*Ursus* spp. (7, 12)

*Vulpes vulpes* (17)

Chipmunks (2, 5, 6, 7, 18)

Deer (7, 12, 13, 18)

Field mice (2)

Groundhogs (4, 18)

Ground squirrels (2, 7)

Guinea pigs (8, 12)

Lab rabbits (12, 17)

Mice (5, 7, 18)

Packrats (5, 12)

Pocket mice (5)

Rabbits (2, 5, 7, 18)

Squirrels (2, 5, 6)

Tree squirrels (7)

Weasels (7)

White mice (12)

Unspecified (10)

Dist.: Alta, BC, Man, Ont

Records: 1. Hewitt 1915 (BC); 2. Bruce 1920 (BC); 3. McLeod 1933 (BC, Man); 4. Buckell 1934 (BC); 5. Hearle 1938 (BC); 6. Holland 1938 (BC); 7. 1939 (Alta); 8. Gregson 1941c exp. (BC); 9. Cowan 1944 (Alta); 10. Brown and Kohls 1950 (Alta); 11. Banfield 1956 (Alta); 12. Gregson 1958 exp. (BC); 13. Stelfox 1962 (Alta); 14. Wilkinson 1965 (BC); 15. Kerr and Holmes 1966 (Alta); 16. Shemanchuk and Kiceniuk 1970 (Alta); 17. Wilkinson 1970 nat./exp. (Alta, BC); 18. Ko 1972b (Ont); 19. Samuel et al. 1978 (Alta)

Remarks: Wilkinson (1970) presumed the subspecies of porcupine from Alberta was *E. d. epixanthium*.

*Dermacentor variabilis* (Say, 1821) Banks, 1907

Hosts: *Blarina brevicauda pallida* (1)  
*Clethrionomys gapperi* (3, 4, 5)  
*C. g. pallixens* (1)  
*Condylura cristata nigra* (1)  
*Erethizon dorsatum* (1, 4)  
*Lepus americanus* (3, 4)  
*Microtus pennsylvanicus* (3, 4, 5)  
*M. p. acadicus* (1)  
*Napaeozapus insignis* (3, 4)  
*Ondatra zibethicus* (4)  
*O. z. zibethicus* (1)  
*Peromyscus leucopus* (1, 3, 4)  
*P. maniculatus* (4, 5)  
*P. m. abietorum* (1)  
*Peromyscus* spp. (1)  
*Procyon lotor* (1, 4)  
*Spermophilus franklinii* (5)  
*S. tridecemlineatus* (5)  
*Synaptomys cooperi* (1, 4)  
*Tamiasciurus hudsonicus* (3)  
*Tamias striatus* (3, 4, 5)  
*Ursus americanus* (4)  
*U. a. americanus* (1)  
*Zapus hudsonius* (3, 4, 5)  
*Z. h. acadicus* (1)  
Unspecified (2)

Dist.: Man, NS

Records: 1. Dodds et al. 1969 (NS); 2. Martel et al. 1969 (NS); 3. Garvie et al. 1978 (NS); 4. Wright 1979 (NS); 5. Burachynsky and Galloway 1985 (Man)

*Haemaphysalis cinnabarina* Koch, 1844

Hosts: Rabbits (1, 2)  
Squirrels (2)

Dist.: BC

Records: 1. Hewitt 1915; 2. Hearle 1938

Remarks: Brown and Kohls (1950) refer Hearle's (1938) specimens to *Haemaphysalis chordeilus* (Packard).

*Haemaphysalis leporis-palustris* (Packard, 1869)  
Neumann, 1897

Hosts: *Clethrionomys gapperi pallescens* (10)  
*Lepus americanus* (1, 2, 5, 7, 8, 9, 11, 12, 13)  
*L. a. struthopus* (10)  
*L. a. virginianus* (4)  
*L. capensis hybridus* (6)  
*L. townsendii* (5)  
*Microtus pennsylvanicus* (12)  
*M. p. acadicus* (10)  
*Odocoileus hemionus* (7)  
*Spermophilus richardsonii* (5)  
*Tamiasciurus hudsonicus* (12)  
*T. h. gymnicus* (10)  
*Tamias striatus* (13)  
Chipmunks (3)

Groundhogs (3)

Hare (3)

Rabbits (2, 3, 4)

Squirrels (2)

Dist.: Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask

Records: 1. Hewitt 1915 (Man); 2. Cameron and Fulton 1927 (Sask); 3. Hearle 1938 (BC); 4. Bequaert 1945 (NB, NS, Ont, Que); 5. Brown and Kohls 1950 (Alta); 6. Judd 1953 (Ont); 7. Scholten et al. 1962 (Ont); 8. Wilson 1967 (NB); 9. Dodds et al. 1969 (NS); 10. Martell et al. 1969 (NS); 11. Ko 1972b nat./exp. (Ont); 12. Wright 1979 (NS); 13. Jones and Thomas 1980 (PEI)

*Ixodes angustus* Neumann, 1899

Hosts: *Blarina brevicauda* (5, 9, 10)

*B. b. pallida* (7)

*Clethrionomys gapperi* (9, 10)

*C. g. pallescens* (7)

*Clethrionomys* spp. (3)

*Condylura cristata* (10)

*Microsorex hoyi* (10)

*Microtus chrotorrhinus* (10)

*M. pennsylvanicus* (9)

*M. p. acadicus* (7)

*Napaeozapus insignis* (9)

*Ochotona* spp. (1)

*Peromyscus leucopus* (9)

*P. maniculatus* (10)

*Peromyscus* spp. (4)

*Sorex cinereus* (10)

*S. c. acadicus* (7)

*S. fumeus* (9, 10)

*S. gaspensis* (10)

*S. palustris* (10)

*Sorex* spp. (1)

*Synaptomys borealis* (10)

*S. cooperi* (10)

*Tamiasciurus douglasii mollipilosus* (2)

*T. hudsonicus* (8)

*Tamias striatus* (6)

*Zapus hudsonius* (10)

Chipmunk (1)

Mice (1)

Rabbit (1)

Squirrel (1)

Vole (1)

Dist.: Alta, BC, NB, NS, Ont

Records: 1. Hearle 1938 (BC); 2. Gregson 1941b (BC); 3. Brown and Kohls 1950 (Alta); 4. Judd 1950 (Ont), 5. 1953 (Ont); 6. Wilson 1967 (Ont); 7. Martell et al. 1969 (NS); 8. Mahrt and Chai 1972 (Alta); 9. Wright 1979 (NS); 10. Whitaker and French 1982 (NB)

*Ixodes californicus* Banks, 1904

Hosts: *Odocoileus hemionus columbianus* (2)

*Peromyscus* spp. (1)

Squirrel (1)

Dist.: BC

Records: 1. Gregson 1942 exp.; 2. Cowan 1946

Remarks: Gregson's (1942) specimens were misidentified and should be *I. pacificus* (Arthur and Snow 1968).

*Ixodes cookei* Packard, 1869

Syn.: *Ixodes hexagonus* var. *cookei* Nuttall and Warburton, 1911

Hosts: *Castor canadensis* (6)  
*Erethizon dorsatum* (12)  
*E. d. dorsatum* (8)  
*Marmota monax* (6, 7, 9, 10, 11)  
*M. m. rufescens* (4, 5)  
*Mephitis mephitis* (5, 6, 7)  
*Mustela erminea* (12)  
*M. vison* (4, 13)  
*M. v. vison* (8)  
*Procyon lotor* (12)  
Deer (3)  
Groundhog (1, 2)  
Packrat (2)  
Squirrel (3)  
Mouse (3)

Dist.: BC, NS, Ont, Que  
Records: 1. Jarvis 1910 (Ont); 2. Hearle 1938 (BC); 3. Gregson 1942 (BC); 4. Bequaert 1945 (NS, Ont, Que); 5. Judd 1950 (Ont), 6. 1954a (Ont); 7. Scholten et al. 1962 (Ont); 8. Martell et al. 1969 (NS); 9. Ko 1972a (Ont), 10. 1972b (Ont), 11. 1973 (Ont); 12. Wright 1979 (NS); 13. Jones and Thomas 1980 (Que)

*Ixodes hearlei* Gregson, 1941

Host: *Tamiasciurus hudsonicus streator*  
Dist.: BC  
Record: Gregson 1941b

*Ixodes hexagonus* Leach, 1815

Host: Weasel  
Dist.: BC  
Record: Hearle 1938

*Ixodes kingi* Bishopp, 1911

Hosts: *Mephitis mephitis* (2)  
*Mustela erminea* (2)  
*M. frenata nevadensis* (2)  
*Spermophilus richardsonii* (1)  
*Taxidea taxus* (1)  
Dist.: Alta, BC, Sask  
Records: 1. Brown and Kohls 1950 (Alta); 2. Wilkinson 1970 (BC, Sask)

*Ixodes marmotae* Cooley and Kohls, 1938

Host: *Mephitis mephitis*  
Dist.: BC  
Record: Wilkinson 1970

*Ixodes marxi* Banks, 1908

Hosts: *Glaucomys sabrinus* (6)  
*G. s. gouldi* (5)  
*Sorex cinereus* (7)  
*Tamiasciurus hudsonicus* (4, 6, 8)  
*T. h. loquax* (3)  
Chipmunk (2)  
Squirrel (1, 2)

Weasel (2)

Dist.: BC, NS, Ont, PEI, Que  
Records: 1. Jarvis 1910 (Ont); 2. Hearle 1938 (BC); 3. Bequaert 1945 (Ont); 4. Scholten et al. 1962 (Ont); 5. Martell et al. 1969 (NS); 6. Wright 1979 (NS); 7. Jones and Thomas 1980 (PEI); 8. Gyorkos and Hilton 1982 (Que)

*Ixodes muris* Bishopp and Smith, 1937

Hosts: *Blarina brevicauda* (4)  
*Clethrionomys gapperi* (4)  
*Microtus pennsylvanicus* (3, 4)  
*M. p. acadicus* (2)  
*M. p. enixus* (1)  
*Napaeozapus insignis* (3)  
*N. i. insignis* (1)  
*Peromyscus leucopus caudatus* (2)  
*P. maniculatus* (4)  
*Sorex arcticus* (4)  
*S. cinereus* (3, 4)  
*S. c. acadicus* (2)  
*Synaptomys cooperi* (3)  
*S. c. cooperi* (2)  
*Tamiasciurus hudsonicus* (3)  
*Tamias striatus* (3)  
*Zapus hudsonius* (3, 4, 5)  
*Z. h. acadicus* (2)

Dist.: NB, Nfld, NS, PEI  
Records: 1. Bequaert 1945 (Nfld, NS); 2. Martell et al. 1969 (NS); 3. Wright 1979 (NS); 4. Jones and Thomas 1980 (NB, NS, PEI), 5. 1982 (NB, NS, PEI)

*Ixodes ochotonae* Gregson, 1941

Hosts: *Neotoma cinerea*  
*Ochotona princeps*  
*O. p. brooksi*  
*O. p. brunnescens*  
*Peromyscus* spp.  
Dist.: BC  
Record: Gregson 1941b

*Ixodes pacificus* Cooley and Kohls, 1943

Hosts: *Eutamias* spp. (2)  
*Glaucomys sabrinus oregonensis* (1)  
*Mustela vison* (2)  
*Odocoileus hemionus* (2)  
*O. h. columbianus* (2)  
*Peromyscus* spp. (2)  
*Scapanus latimanus* (2)  
*Tamiasciurus* spp. (2)  
Coast deer (2)  
Mouse (2)  
Dist.: BC  
Records: 1. Spencer 1956; 2. Arthur and Snow 1968

*Ixodes ricinus* (Linnaeus, 1758)

Host: Coast deer  
Dist.: BC  
Record: Hearle 1938  
Remarks: According to Arthur and Snow (1968), Hearle's (1938) specimens of *I. ricinus* are misidentified, and are correctly *I. pacificus*.



*Ixodes rugosus* Cooley and Kohls, 1945

Host: *Canis latrans*  
Dist.: BC  
Record: Wilkinson 1970

*Ixodes scapularis* Say, 1821

Host: *Odocoileus virginianus*  
Dist.: Ont  
Record: Watson and Anderson 1976

*Ixodes sculptus* Neumann, 1904

Hosts: *Canis latrans* (3)  
*Mustela frenata* (1)  
*Spermophilus columbianus* (1)  
*S. franklinii* (4)  
*S. richardsonii* (1, 4)  
Ground squirrel (2)  
Dist.: Alta, BC, Sask  
Records: 1. Brown and Kohls 1950 (Alta); 2. MacNay 1952 (Sask); 3. Wilkinson 1970 (BC); 4. Hilton and Mahrt 1971 (Alta)

*Ixodes soricis* Gregson, 1942

Hosts: *Sorex vagrans*  
*S. v. vagrans*  
*Sorex* spp.  
Dist.: BC  
Record: Gregson and Kohls 1952

*Ixodes spinipalpus* Hadwen and Nuttall, 1916

Syn.: *Ixodes dentatus spinipalpis* Hadwen and Nuttall, 1916  
Hosts: *Lepus americanus* (1)  
*Neotoma c. cinerea* (4)  
*Ochotona* sp. (2)  
*Sorex cinereus* (3)  
*Tamiasciurus douglasii* (1)  
Rabbit (2)  
Squirrel (2)  
Dist.: Alta, BC  
Records: 1. Nuttall 1916 (BC); 2. Hearle 1938 (BC); 3. Brown and Kohls 1950 (Alta); 4. Shemanchuk and Kiceniuk 1970 (Alta)  
Remarks: Brown and Kohls (1950) believed the shrew was *S. cinereus*, but they were not certain.

*Ixodes texanus* Banks, 1909

Hosts: *Marmota monax* (6)  
*Mephitis mephitis* (5)  
*Mustela vison* (4)  
*Procyon lotor* (1, 5)  
*Vulpes vulpes* (5)  
Mustelidae gen. sp. (3)  
Mink (2)  
Squirrel (1)  
Weasel (1, 2)  
Dist.: BC, Ont  
Records: 1. Hearle 1938 (BC); 2. Gregson 1941b (BC), 3. 1941c exp. (BC); 4. Bequaert 1945 (Ont); 5. Webster 1966 (Ont); 6. Ko 1972b (Ont)

*Ixodes* spp.

Hosts: *Clethrionomys gapperi* (1)  
*Erethizon dorsatum* (2)  
*Peromyscus maniculatus* (1)  
Dist.: BC, Ont  
Records: 1. Scholten et al. 1962 (Ont); 2. Wilkinson 1970 (BC)

Unidentified Ixodidae

Ixodidae gen. sp.

Hosts: Rodents  
Dist.: Alta, BC  
Record: Gibbons 1939

Unidentified Chelicerata

Acari gen. sp.

Host: *Glaucomys sabrinus oregonensis*  
Dist.: BC  
Record: Spencer 1956

## PHYLUM UNIRAMIA

### CLASS INSECTA

#### ORDER COLEOPTERA

##### Family LEPTINIDAE

*Leptinillus aplodontiae* (Ferris, 1918)

Syn.: *Leptinus aplodontiae* Ferris, 1918  
Hosts: *Aplodontia pacifica* (2)  
*Aplodontia* spp. (1)  
Dist.: BC  
Records: 1. Hopping 1949; 2. Spencer 1957

*Leptinillus validus* (Horn, 1872)

Syn.: *Leptinus validus* Horn, 1872  
Hosts: *Castor canadensis* (1, 3, 4, 5)  
Beaver (2)  
Dist.: BC, Hudson's Bay Area, Ont, Que  
Records: 1. Horn 1872 (Hudson's Bay Area); 2. Hopping 1949 (BC); 3. Judd 1954a (Ont); 4. Parks and Barnes 1955 (BC, Ont, Que); 5. Spencer 1957 (BC)  
Remarks: Horn (1872) did not specify the host, we assumed it was *Castor canadensis*.

*Leptinus americanus* LeConte, 1866

Hosts: *Blarina brevicauda* (2)  
*Microtus oregoni serpens* (3)  
*Sorex* spp. (1, 3)  
Dist.: BC, Ont  
Records: 1. Hopping 1949 (BC); 2. Jameson 1950 (Ont); 3. Spencer 1957 (BC)  
Remarks: Spencer (1957) notes that Hopping (1949) recorded his material from *Sorex* sp. as *Leptinus testaceus* Muller, 1817. It is in fact *L. americanus*. Gregson (1940), cited in Hopping (1949), also reported *L. testaceus* from *Sorex* sp. from BC.

*Platypsyllus castoris* Ritsema, 1869

Hosts: *Castor canadensis* (3, 4)  
Beaver (1, 2)

Dist.: BC, Ont

Records: 1. Anon 1930 (Ont); 2. Hopping 1949 (BC); 3. Spencer 1957 (BC); 4. Scholten et al. 1962 (Ont)

## ORDER DIPTERA

### Family CALLIPHORIDAE

*Phormia regina* (Meigen, 1826)

Host: *Odocoileus hemionus columbianus*

Dist.: BC

Record: Cowan 1946

### Family CUTEREBRIDAE

*Cuterebra americana* var. *polita* Coquillett, 1898

Host: unspecified

Dist.: BC

Record: Cameron 1926

*Cuterebra angustifrons* Dalmat, 1942

Hosts: *Peromyscus leucopus* (2)

*P. l. noveboracensis* (1)

Dist.: Ont

Records: 1. Sillman 1957; 2. Sillman and Smith 1959

*Cuterebra emasculator* Fitch, 1856

Hosts: *Tamias striatus* (2, 3, 4, 5)

*T. s. lysteri* (1)

Dist.: Ont

Records: 1. Cameron 1926 (unspecified); 2. Bennett 1955; 3. Scholten et al. 1962; 4. Bennett 1972, 5. 1973

*Cuterebra fasciata* Swenk, 1905

Host: unspecified

Dist.: BC, NB

Record: Cameron 1926

Remarks: The larvae were found in subcutaneous tissues.

*Cuterebra fontinella* Clark, 1827

Host: *Mus musculus*

Dist.: Ont

Record: Judd 1954b

Remarks: The larva emerged from the skin leaving a hole that penetrated the underlying muscle of the abdominal wall and led into the body cavity (Judd 1954b).

*Cuterebra grisea* Coquillett, 1904

Hosts: *Peromyscus leucopus noveboracensis* (3)

*P. maniculatus* (4)

*P. m. austerus* (5)

*Spermophilus richardsonii* (1)

*S. tridecemlineatus* (1)

Field mouse

House mouse (1)

Mice (2)

Dist.: Alta, BC, Man, NWT, Ont, Sask  
Records: 1. Cameron 1926 (Alta, BC, Man, NWT, Sask); 2. Strickland 1938 (Alta); 3. Sillman 1957 (Ont); 4. Hunter et al. 1972 (BC); 5. Hunter and Webster 1974 (BC)

Remarks: The larvae were found in subcutaneous tissues. Cameron's (1926) host and distribution records are not well defined.

*Cuterebra similis* Johnson, 1903

Host: unspecified

Dist.: BC

Record: Cameron 1926

*Cuterebra tenebrosa* Coquillett, 1898

Host: unspecified

Dist.: BC

Record: Cameron 1926

*Cuterebra* spp.

Hosts: *Microtus oregoni* (6)

*M. townsendii* (7)

*Mus musculus* (3)

*Peromyscus leucopus noveboracensis* (2, 3, 4)

*P. maniculatus* (5)

*P. m. gracilis* (3)

*P. m. maniculatus* (3)

*Rattus norvegicus* (1)

*Rattus* spp. (1)

*Sylvilagus floridanus mearnsii* (2)

*Tamias striatus* (3)

Gopher (1)

House mouse (1)

Rabbit (3)

Vole (1)

Dist.: BC, Man, Ont, Sask

Records: 1. Cameron 1926 (Man, Sask, unspecified); 2. Jameson 1943 (Ont); 3. Sillman 1956 (Ont); 4. Sealander 1961 (Ont); 5. Scholten et al. 1962 (Ont); 6. Hunter et al. 1972 (BC); 7. Boonstra 1977 (BC)

### Family HIPPOBOSCIDAE

*Lipoptena depressa* (Say, 1823) Sacken, 1878

Hosts: *Odocoileus hemionus* (2, 9)

*O. h. columbianus* (3, 4, 5, 6, 7, 8)

*O. virginianus* (9)

*Odocoileus* spp. (1)

Dist.: BC

Records: 1. Ferris and Cole 1922; 2. Bequaert 1935, 3. 1937; 4. Spencer 1938a, 5. 1938b; 6. Bequaert 1942; 7. Cowan 1943, 8. 1946; 9. Bequaert 1957

Remarks: Bequaert (1937) recorded the host as the Columbian white-tailed deer by error (Bequaert 1942).

*Melophagus ovinus montanus* Ferris and Cole, 1922

Hosts: *Canis latrans* (2)

*Ovis canadensis* (1)

Dist.: Alaska-Yukon boundary, BC

Records: 1. Ferris and Cole 1922 (Alaska-Yukon boundary); 2. Bequaert 1942 (BC)

Remarks: Bequaert (1942) did not recognize *M. o. montanus* as a distinct subspecies.

*Neolipoptena ferrisi* (Bequaert, 1935) Bequaert, 1942

Syn.: *Lipoptena ferrisi* Bequaert, 1935

Hosts: *Odocoileus hemionus* (1, 7)

*O. h. columbianus* (3, 4, 6)

*O. h. hemionus* (3, 4, 5)

*O. virginianus* (1)

Dist.: BC

Records: 1. Bequaert 1935, 2. 1937; 3. Spencer 1938a, 4. 1938b; 5. Bequaert 1942; 6. Cowan 1946; 7. Bequaert 1957

#### Family NYCTERIBIIDAE

*Basilis forcipata* Ferris, 1924

Hosts: *Myotis lucifugus* (2)

Bat (1)

Dist.: BC

Record: Spencer 1938b, 2. 1939a

*Basilis* spp.

Host: *Eumops perotis californica*

Dist.: BC

Record: Spencer 1939a

#### Family OESTRIDAE

*Cephenemyia apicata* Bennett and Sabrosky, 1962

Host: *Odocoileus hemionus*

Dist.: Alta, BC

Record: Bennett and Sabrosky 1962

*Cephenemyia jellisoni* Townsend, 1941

Hosts: *Alces alces* (4)

*Cervus elaphus* (5)

*Odocoileus hemionus* (2, 4)

*O. h. columbianus* (1, 3)

*O. h. hemionus* (1)

Dist.: Alta, BC, Ont

Records: 1. Cowan 1943 (BC), 2. 1944 (Alta), 3. 1946 (BC); 4. Bennett and Sabrosky 1962 (BC, Ont); 5. Flook and Stenton 1969 (Alta)

*Cephenemyia phobifer* (Clark, 1815) Aldrich, 1915

Hosts: *Alces alces* (3)

*Odocoileus virginianus* (2)

*Rangifer tarandus caribou* (1)

Dist.: Ont, Sask

Records: 1. Erickson and Highby 1942 (Sask); 2. Bennett 1962 (Ont); 3. Bennett and Sabrosky 1962 (Ont)

Remarks: The larvae were found in the nasal passages and retropharyngeal pouches.

*Cephenemyia trompe* (Modeer, 1786)

Syn.: *Cephenemyia nasalis* Seguy, 1927

Hosts: *Odocoileus virginianus* (5)

*Rangifer tarandus* (3, 4, 5)

*R. t. caribou* (2)

Dist.: Alta, BC, Man, Nfld, NWT, Ont, Sask  
Records: 1. Buckell 1934 (BC); 2. Cowan 1944 (Alta, BC); 3. Banfield 1954 (Man, NWT); 4. Gibbs 1960 (unspecified); 5. Bennett and Sabrosky 1962 (Nfld, NWT, Ont, Sask)

Remarks: The larvae were found in the throat and gullet (Buckell 1934).

*Cephenemyia* spp.

Hosts: *Alces alces* (1, 2)

*Odocoileus virginianus* (3)

Dist.: BC, Ont

Records: 1. Peterson 1955 (Ont); 2. Ritcey and Edwards 1958 (BC); 2. Scholten et al. 1962 (Ont)

Remarks: Ritcey and Edwards (1958) felt their specimens were probably *C. jellisoni*.

*Oedemagena tarandi* Linnaeus, 1758

Hosts: *Rangifer tarandus* (2, 3, 4)

*R. t. groenlandicus* (5)

*R. t. caribou* (1)

Dist.: Alta, BC, Man, NWT, YT

Records: 1. Cowan 1944 (Alta, BC); 2. Banfield 1954 (Man, NWT); 3. Choquette et al. 1957 (NWT); 4. Gibbs 1960 (unspecified); 5. Kelsall 1972 (Alta, BC, NWT, YT)

#### Family SARCOPHAGIDAE

*Wohlfahrtia vigil* (Walder, 1849)

Syn.: *Wohlfahrtia meigenii* Schiner, 1862

Hosts: *Microtus townsendii* (3)

Lab rat (1, 2)

Dist.: Alta, BC

Records: 1. Morrison 1937 (Alta); 2. Strickland 1938 (Alta); 3. Boonstra 1977 (BC)

Remarks: The larvae were recovered from subcutaneous tissues (Morrison 1937).

#### Family STREBLIDAE

*Trichobius* spp.

Host: Bat

Dist.: BC

Record: Spencer 1938b

### ORDER HEMIPTERA

#### Family CIMICIDAE

*Cimex pilosellus* (Horvath)

Hosts: *Eptesicus fuscus* (3)

*E. f. fuscus* (1)

*E. f. pallidus* (1)

*Lasionycteris noctivagans* (1, 3, 4)

*Myotis lucifugus* (3)

*Myotis l. lucifugus* (2)

Dist.: BC, Ont

Records: 1. Spencer 1934 (BC); 2. Dymond 1938 (Ont); 3. Spencer 1939a (BC); 4. Judd 1950 (Ont)



ORDER MALLOPHAGA

Family TRICHODECTIDAE

*Damalinea concavifrons* Hopkins, 1960

Hosts: *Cervus elaphus* (2)

*C. e. nelsoni* (1)

Dist.: Alta, BC

Records: 1. Hopkins 1960 (Alta); 2. Flook and Stenton 1969 (Alta, BC)

*Damalinea longicornis* (Nitzsch, 1818)

Hosts: *Cervus elaphus* (2)

*C. e. nelsoni* (1)

Dist.: Alta

Record: 1. Hopkins 1960; 2. Flook and Stenton 1969

*Damalinea oreamnidis* Hopkins, 1960

Host: *Oreamnos americanus missoulae*

Dist.: Alta

Record: Hopkins 1960

*Damalinea ovis* (Schränk, 1781)

Host: *Ovis canadensis californianus*

Dist.: BC

Record: Hopkins 1960

*Damalinea sedecimdecembrii* (Eichler, 1946)

Host: *Bison bison*

Dist.: NWT

Record: Hopkins 1960

*Eutrichophilus setosus* (Giebel, 1874)

Hosts: *Erethizon dorsatum* (1, 2, 4)

*E. d. nigrescens* (3)

Dist.: Alta, BC, NS, Ont

Records: 1. Thompson 1934 (NS); 2. Judd 1954a (Ont); 3. Hopkins 1960 (Alta, BC); 4. Wright 1979 (NS)

*Felicola spenceri* Hopkins, 1960

Host: *Lynx canadensis canadensis*

Dist.: BC

Record: Hopkins 1960

*Geomydoecus* spp.

Host: *Thomomys talpoides*

Dist.: Sask

Record: Hopkins 1960

Remarks: This species may be *G. thomomyus* (Hopkins, 1960).

*Neotrichodectes mephitidis* (Packard, 1872)

Host: *Mephitis mephitis*

Dist.: Ont

Records: Judd 1953; Scholten et al. 1962

*Stachiella kingi* (McGregor, 1917)

Syn.: *Trichodectes kingi* McGregor, 1917

Hosts: *Mustela erminea* (2)

*M. nivalis rixosa* (1)

Dist.: BC, Ont

Record: 1. Hopkins 1960 (BC); 2. Scholten et al. 1962 (Ont)

*Trichodectes canis* (de Geer, 1778)

Hosts: *Canis latrans incolatus* (3)

*C. l. lestes* (3)

*C. lupus* (1, 2)

*C. l. columbianus* (3)

Dist.: BC, Ont

Records: 1. Thompson 1934 (Ont); 2. Judd 1954a (Ont); 3. Hopkins 1960 (BC)

Remarks: Thompson (1934) had some doubts as to the correctness of the parasite genus, *Trichodectes*.

*Trichodectes ermineae* (Hopkins, 1941)

Hosts: *Mustela erminea anguiniae*

*M. e. richardsonii*

*M. vison energumenos*

Dist.: BC

Record: Hopkins 1960

*Trichodectes minutus* Paine, 1912

Host: *Mustela frenata oribusus*

Dist.: BC

Record: Hopkins 1960

*Trichodectes octomaculatus* Paine, 1912

Host: *Procyon lotor vancouverensis*

Dist.: BC

Record: Hopkins 1960

*Trichodectes osborni* (Keler, 1944)

Host: *Spilogale putorius gracilis*

Dist.: BC

Record: Hopkins 1960

*Trichodectes parallelus* (Osborn, 1896)

Host: *Odocoileus hemionus*

Dist.: Alta

Record: Cowan 1944

*Trichodectes pinguis euarctidos* Hopkins, 1954

Hosts: *Ursus americanus* (1, 3)

*U. a. cinnamomum* (2)

Dist.: BC, Ont

Records: 1. Hopkins 1954 (BC, Ont), 2. 1960 (BC); 3. Addison et al. 1978 (Ont)

*Trichodectes tibialis* (Piaget, 1880)

Host: *Odocoileus h. hemionus*

Dist.: BC

Record: Buckell 1934

*Tricholipeurus lipeuroides* (Megnin, 1884)

Syn.: *Damalinea lipeuroides* (Megnin, 1884)

Holland 1960

*Tricholipeurus virginianus* Peters, 1930

Hosts: *Canis latrans incolatus* (3)

*O. hemionus* (7)

*O. h. columbianus* (1, 2, 3)

*O. h. hemionus* (1, 3)

*O. virginianus* (4, 6, 7)

*O. v. borealis* (5)

Dist.: Alta, BC, Ont, Que

Records: 1. Spencer 1938a (BC); 2. Cowan 1946 (BC); 3. Hopkins 1960 (Alta, BC); 4. Scholten et al. 1962 (Ont); 5. Webster and Stewart 1964 (Que); 6. Watson and Anderson 1975 (Ont); 7. Samuel et al. 1980 (Alta)

*Tricholipeurus parallelus* (Osborn, 1896)

Hosts: *O. hemionus* (2, 7)  
*O. h. columbianus* (1, 3, 4)  
*O. h. hemionus* (1, 4)  
*O. virginianus* (5, 6, 7)  
*Odocoileus* spp. (5)

Dist.: Alta, BC, NS, Ont  
Records: 1. Spencer 1938a (BC); 2. Cowan 1944 (Alta, BC), 3. 1946 (BC); 4. Hopkins 1960 (BC); 5. Walker and Beckland 1970 (NS, Ont); 6. Watson and Anderson 1975 (Ont); 7. Samuel et al. 1980 (Alta)

*Tricholipeurus* spp.

Host: *Odocoileus hemionus columbianus*  
Dist.: BC  
Record: Hopkins 1960

Unidentified Mallophaga

Mallophaga gen. spp.

Hosts: *Cervus elaphus*  
*Oreamnos americanus*  
Dist.: Alta, BC  
Record: Cowan 1944

ORDER SIPHONAPTERA

Family CERATOPHYLLIDAE

*Amalaraeus athabasca* (Holland, 1952)

Syn.: *Malaraeus penicilliger athabasca*  
Holland, 1952

Hosts: *Clethrionomys gapperi* (1, 4)  
*C. g. athabasca* (1, 4)  
*C. g. proteus* (1, 3, 4)  
*C. g. ungava* (1, 2, 3, 4)  
*Clethrionomys* spp. (4)  
*Microtus pennsylvanicus* (1, 4)  
*M. p. drummondii* (4)  
*Microtus* spp. (1, 4)  
*Mustela erminea* (4)  
*Peromyscus maniculatus* (4)  
*Synaptomys borealis* (1, 4)

Dist.: Alta, BC, Man, Nfld, NWT, Que, Sask  
Records: 1. Holland 1952b (Alta, Man, Nfld, NWT, Que); 2. Gabbutt 1961 (Nfld); 3. Harper 1961 (Nfld, Que); 4. Holland 1984 (BC, Man, Nfld, NWT, Que, Sask)

*Amalaraeus dissimilis* (Jordan, 1929)

Syn.: *Ceratophyllus penicilliger* Jordan, 1929  
*Malaraeus penicilliger dissimilis* Jordan, 1938

Hosts: *Alopex lagopus* (7)  
*Clethrionomys gapperi* (3, 7)  
*C. g. athabasca* (3, 5, 7)  
*C. g. saturatus* (3)  
*C. rutilus* (6, 7)

*C. r. dawsoni* (4, 7)  
*Clethrionomys* spp. (7)  
*Eutamias minimus* (7)  
*Lemmus sibiricus* (7)  
*Lepus americanus dalli* (7)  
*Microtus longicaudus* (7)  
*M. l. vellerosus* (7)  
*M. miurus* (7)  
*M. oeconomus* (7)  
*M. operarius* (7)  
*M. pennsylvanicus* (7)  
*M. p. drummondii* (7)  
*M. xanthognathus* (7)  
*Microtus* spp. (7)  
*Mustela erminea* (7)  
*M. e. arctica* (7)  
*Neotoma cinerea occidentalis* (7)  
*Ochotona collaris* (7)  
*Ondatra* spp. (7)  
*Peromyscus maniculatus* (7)  
*P. m. borealis* (1)  
*Peromyscus* spp. (7)  
*Phenacomys intermedius* (3, 7)  
*Phenacomys* spp. (7)  
*Spermophilus lateralis* (7)  
*Synaptomys borealis* (7)  
*Vulpes vulpes* (2)  
*Vulpes* spp. (2)  
Mice (3, 7)

Dist.: Alta, BC, NWT, YT  
Records: 1. Jordan 1932 (BC); 2. Holland 1944 (NWT), 3. 1949 (Alta, BC, NWT), 4. 1952b (BC, YT); 5. Harper 1956 (NWT); 6. Mitchell and Behin 1965 (NWT); 7. Holland 1984 (Alta, BC, NWT, YT)

*Amphalius runatus necopinus* (Jordan, 1925) Jordan, 1933

Syn.: *Amphalius necopinus* (Jordan, 1925)  
Hosts: *Ochotona princeps* (1, 2, 3)  
*Ochotona* spp. (4)

Dist.: Alta, BC  
Records: 1. Holland 1941a (Alta, BC); 2. Brown 1944 (Alta); 3. Holland 1949 (Alta), 4. 1984 (Alta)

*Ceratophyllus adustus* Jordan, 1932

Host: *Erethizon dorsatum*  
Dist.: BC  
Records: Jordan 1932

*Ceratophyllus diffinis* Jordan, 1925

Host: *Eutamias* spp.  
Dist.: BC  
Record: Holland 1984

*Ceratophyllus gallinae* (Schrank, 1803)

Hosts: *Clethrionomys gapperi* (1)  
*Glaucomys volans* (2)  
Red squirrel (2)  
Dist.: Man  
Records: 1. Holland 1949, 2. 1984

*Ceratophyllus garei* Rothschild, 1902

Hosts: *Canis latrans*

*Clethrionomys rutilus dawsoni*

*Clethrionomys* spp.

*Dicrostonyx hudsonius*

*Mustela nivalis rixosa*

*Peromyscus* spp.

*Sorex vagrans obscurus*

*Tamiasciurus hudsonicus preblei*

Lemming

Dist.: Alta, BC, Man, NWT, Que, YT

Record: Holland 1984

*Ceratophyllus lunatus tundrensis* Holland, 1944

Hosts: *Clethrionomys rutilus dawsoni* (2)

*Dicrostonyx groenlandicus richardsoni*  
(2)

*D. hudsonius* (2)

*Dicrostonyx* spp. (3)

*Martes americana* (1)

*Microtus* spp. (3)

*Mustela erminea* (2, 3)

*M. e. arctica* (1)

*M. e. cicognanii* (3)

*Mustela* spp. (2, 3)

*Spermophilus parryii* (2, 3)

*S. p. parryii* (2)

*Tamiasciurus hudsonicus* (3)

Red-backed mouse (3)

Weasel (3)

Dist.: Man, Nfld, NWT, Que, YT

Records: 1. Holland 1944 (NWT), 2. 1951

(NWT, Que), 3. 1984 (Man, Nfld, NWT, Que,  
YT)

*Ceratophyllus niger* Fox, 1908

Host: *Tamiasciurus hudsonicus*

Dist.: BC

Record: 1. Holland 1949

*Ceratophyllus petrochelidoni* Wagner, 1936

Host: *Tamiasciurus hudsonicus picatus*

Dist.: BC

Record: Holland 1984

*Dactylopsylla comis* Jordan, 1929

Host: *Thomomys talpoides*

Dist.: BC

Record: Jordan 1929

*Dactylopsylla rara* Fox, 1940

Hosts: *Mustela erminea*

*Thomomys talpoides*

Dist.: Alta, Sask

Record: Holland 1984

*Dasypyllus gallinulae perpinnatus* (Baker, 1904)

Hosts: *Microtus oregoni serpens* (2)

*Peromyscus* spp. (2)

*Tamiasciurus douglasii mollipilosus* (1)

Dist.: BC

Records: 1. Wagner 1936; 2. Holland 1984

*Foxella ignota albertensis* (Jordan and Rothschild,  
1915)

Syn.: *Ceratophyllus ignotus albertensis* Jordan  
and Rothschild, 1915

*Dactylopsylla ignota albertensis* (Jordan  
and Rothschild, 1915)

Hosts: *Geomys* spp. (1, 3)

*Lynx canadensis* (1, 3)

*Microtus pennsylvanicus drummondii*  
(5)

*Mustela erminea* (6)

*M. e. arctica* (6)

*M. frenata* (6)

*Mustela* spp. (1, 3)

*Peromyscus maniculatus bairdii* (5)

*Thomomys talpoides* (4, 6)

*T. t. fuscus* (2)

*Thomomys* spp. (6)

Pocket gopher (6)

Weasel (4)

Dist.: Alta, Man, Sask

Records: 1. Jordan and Rothschild 1915 (Alta);

2. Holland 1941a (Alta); 3. Brown 1944 (Alta);

4. Holland 1949 (Alta); 5. Buckner and Blasko

1969 (Man); 6. Holland 1984 (Alta, Sask)

*Foxella ignota ignota* (Baker, 1895)

Hosts: Pocket gopher

Weasel

Dist.: Man

Record: Holland 1984

*Foxella ignota recula* (Jordan and Rothschild, 1915)

Syn.: *Ceratophyllus ignotus recula* Jordan and  
Rothschild, 1915

*Dactylopsylla ignota recula* (Jordan and  
Rothschild, 1915)

Hosts: *Mustela erminea* (3)

*M. frenata* (1, 2, 3)

*M. f. arizonensis* (2, 4)

*Mustela* spp. (1, 4)

*Spermophilus c. columbianus* (3)

*Thomomys talpoides* (1, 3, 4)

*T. t. incensus* (2, 4)

*Thomomys* spp. (4)

Gopher (4)

Pocket gopher (4)

Dist.: BC

Records: 1. Jordan and Rothschild 1915; 2.

Wagner 1936; 3. Holland 1949, 4. 1984

*Malaraeus bitterrootensis* (Dunn and Parker, 1923)

Hosts: *Mus* spp. (2, 3)

*Mustela erminea invicta* (3)

*Neotoma cinerea* (1)

*Neotoma* spp. (3)

Dist.: Alta, BC

Records: 1. Wagner 1936a (BC); 2. Brown 1944

(Alta); 3. Holland 1984 (Alta)



*Malareus euphorbi* (Rothschild, 1905)

Syn.: *Ceratophyllus euphorbi* Rothschild, 1905

Hosts: *Clethrionomys* spp. (4)

*Mustela frenata longicauda* (3)  
*Peromyscus maniculatus* (1, 2, 3, 4)  
*P. m. artemisiae* (3)  
*P. m. nebrascensis* (3)  
*Peromyscus* spp. (4)  
*Tamiasciurus hudsonicus baileyi* (4)  
Deer mouse (4)

Dist.: Alta, BC, NWT, Sask

Records: 1. Rothschild 1905 (BC); 2. Wagner 1936a (BC); 3. Holland 1949 (Alta, BC, Sask), 4. 1984 (Alta, BC, NWT, Sask)

*Malareus telchinus* (Rothschild, 1905)

Syn.: *Ceratophyllus telchinum* Rothschild, 1905

Hosts: *Clethrionomys gapperi* (2, 3)

*C. g. saturatus* (1)  
*Clethrionomys* spp. (3)  
*Microtus longicaudus* (2, 3)  
*M. montanus canescens* (3)  
*Microtus* spp. (3)  
*Mus musculus* (3)  
*Mus* spp. (3)  
*Mustela* spp. (3)  
*Peromyscus maniculatus* (2, 3)  
*P. m. artemisiae* (2, 3)  
*P. m. austerus* (2, 3)  
*P. m. borealis* (2)  
*P. m. interdictus* (2)  
*P. m. oreas* (2)  
*P. sitkensis* (3)  
*Peromyscus* spp. (2, 3)  
*Phenacomys intermedius* (3)  
*Sorex* spp. (1, 2)  
*Spermophilus columbianus* (2)  
*Zapus* spp. (3)  
Mice (2, 3)  
Red-backed vole (3)  
Shrew (3)

Dist.: Alta, BC

Records: 1. Rothschild 1905 (BC); 2. Holland 1949 (BC), 3. 1984 (Alta, BC)

*Megabothris abantis* (Rothschild, 1905)

Syn.: *Ceratophyllus abantis* Rothschild, 1905

*Trichopsylla abantis* (Rothschild, 1905)

Hosts: *Clethrionomys gapperi* (6, 7)

*C. g. saturatus* (6)  
*Clethrionomys* spp. (7)  
*Eutamias* spp. (6)  
*Lepus americanus* (6, 7)  
*Microtus longicaudus* (6, 7)  
*M. l. macrurus* (6, 7)  
*M. oregoni serpens* (2, 6, 7)  
*M. pennsylvanicus* (7)  
*M. p. drummondii* (1, 7)  
*M. richardsoni* (7)  
*M. r. richardsoni* (6)  
*M. townsendii* (2)

*M. t. townsendii* (7)

*Microtus* spp. (6, 7)

*Mustela erminea* (6)

*M. e. cicognanii* (4)

*M. e. fallenda* (6)

*M. frenata* (1, 2, 5, 7)

*M. f. oribasa* (6, 7)

*Mustela* spp. (7)

*Neotoma cinerea* (6, 7)

*N. c. drummondii* (7)

*N. c. occidentalis* (6)

*Ochotona princeps* (6)

*O. p. princeps* (6)

*Ochotona* spp. (7)

*Peromyscus maniculatus* (3, 6, 7)

*P. m. alpinus* (7)

*P. m. artemisiae* (6)

*P. m. austerus* (6)

*P. m. borealis* (6)

*P. m. oreas* (6)

*Peromyscus* spp. (6, 7)

*Phenacomys intermedius* (6, 7)

*P. i. intermedius* (6)

*Rattus norvegicus* (4, 6, 7)

*Sorex* spp. (7)

*Spermophilus c. columbianus* (6)

*Synaptomys borealis truei* (6)

*Synaptomys* spp. (6, 7)

*Tamiasciurus hudsonicus* (7)

*T. h. streatori* (2)

*Thomomys* spp. (7)

*Vulpes vulpes* (6)

*Zapus hudsonius* (7)

*Z. princeps idahoensis* (6)

*Z. t. trinotatus* (6)

*Zapus* spp. (6, 7)

Chipmunk (7)

Mouse (6)

Dist.: Alta, BC, YT

Records: 1. Rothschild 1905 (Alta, BC); 2. Wagner 1936a (BC), 3. 1936b (BC); 4. Holland 1942 (Alta, BC); 5. Brown 1944 (Alta); 6. Holland 1949 (Alta, BC), 7. 1984 (Alta, BC, YT)

*Megabothris acerbus* (Jordan, 1925) Jordan, 1933

Syn.: *Ceratophyllus acerbus* Jordan, 1925

*Trichopsylla acerba* (Jordan, 1925)

Hosts: *Clethrionomys* spp. (5)

*Eutamias minimus* (5)

*Sciurus carolinensis* (5)

*Tamias striatus* (1, 4, 5)

*T. s. griseus* (3)

*T. s. lysteri* (2)

*Tamias* spp. (5)

Chipmunk (3, 5)

Dist.: Man, Ont

Records: 1. Jordan 1925 (unspecified); 2. Jameson 1943 (Ont); 3. Holland 1949 (Ont); 4. Scholten et al. 1962 (Ont); 5. Holland 1984 (Man, Ont)

*Megabothris asio* (Baker, 1904)

Syn.: *Ceratophyllus asio* Baker, 1904

Hosts: *Clethrionomys gapperi* (3)

*C. g. ungava* (2)

*Microtus pennsylvanicus* (3, 5)

*M. p. drummondii* (1)

*M. p. enixus* (2)

*Phenacomys intermedius celatus* (2)

*Zapus hudsonicus* (4, 5)

Dist.: NB, Nfld, NS, NWT, Ont

Records: 1. Harper 1956 (NWT); 2. Gabbutt 1961 (Nfld); 3. Scholten et al. 1962 (Ont); 4.

Jones and Thomas 1982 (NS); 5. Whitaker and French 1982 (NB)

*Megabothris asio asio* (Baker, 1904) Jordan, 1933

Syn.: *Trichopsylla asio asio* (Baker, 1904)

Hosts: *Blarina brevicauda* (4)

*Blarina* spp. (11)

*Clethrionomys gapperi* (11)

*C. g. proteus* (3, 11)

*C. g. ungava* (11)

*Condylura cristata* (9, 10, 11)

*Mephitis mephitis* (4)

*Microtus pennsylvanicus* (7, 8, 9, 11)

*M. p. enixus* (6)

*M. p. pennsylvanicus* (2)

*M. p. terraenovae* (3)

*Microtus* spp. (11)

*Mus musculus* (11)

*Mustela erminea* (11)

*Mustela* spp. (1, 5, 11)

*Napaeozapus insignis* (9)

*Peromyscus* spp. (11)

*Phenacomys intermedius celatus* (11)

*Phenacomys* spp. (11)

*Rattus* spp. (11)

*Sorex* spp. (11)

*Synaptomys borealis medioxinus* (6)

*S. cooperi* (9, 11)

*Synaptomys* spp. (11)

*Zapus hudsonius* (9, 11)

*Zapus* spp. (11)

Lemming (11)

Meadow vole (11)

Dist.: Alta, NB, Nfld, NS, Ont, PEI, Que

Records: 1. Brown 1944 (Alta); 2. Baker 1946 (Que); 3. Holland 1950 (Nfld, Que); 4. Judd 1953 (Ont); 5. Brown 1955 (NB); 6. Harper 1961 (Nfld); 7. Robert 1962 (Que); 8. Brown 1968 (NB); 9. Wright 1979 (NS); 10. Whitaker and French 1982 (NB); 11. Holland 1984 (NB, Nfld, NS, Ont, PEI, Que)

*Megabothris asio megalopolis* (Jordan, 1929)

Hosts: *Blarina brevicauda manitobensis* (5)

*Clethrionomys gapperi* (4, 5)

*C. g. athabascae* (5)

*C. g. loringi* (5)

*C. rutilus* (5)

*C. r. dawsoni* (5)

*Clethrionomys* spp. (5)

*Dicrostonyx groenlandicus richardsoni* (3, 5)

*D. hudsonicus* (3)

*Dicrostonyx* spp. (3, 5)

*Eutamias minimus borealis* (3)

*Eutamias* spp. (5)

*Microtus ochrogaster* (5)

*M. oeconomus* (5)

*M. pennsylvanicus* (3, 5)

*M. p. drummondii* (1, 3, 5)

*M. p. labradorius* (3)

*Microtus* spp. (3, 5)

*Mustela erminea* (5)

*M. frenata* (5)

*Mustela* spp. (2, 3, 5)

*Peromyscus maniculatus* (5)

*P. m. bairdii* (5)

*P. m. borealis* (1, 3)

*Peromyscus* spp. (5)

*Phenacomys* spp. (5)

*Sorex palustris* (5)

*Spermophilus r. richardsonii* (3)

*Synaptomys borealis* (5)

*Synaptomys* spp. (5)

*Tamias striatus* (4)

*T. s. griseus* (5)

*Tamiasciurus hudsonicus* (5)

*Zapus hudsonius* (5)

*Zapus* spp. (3)

Weasel (5)

Dist.: Alta, BC, Man, NWT, Ont, Que, Sask, YT  
Records: 1. Jordan 1929 (BC); 2. Brown 1944 (Alta); 3. Holland 1950 (Alta, BC, Man, NWT, Ont, Que, Sask); 4. Buckner 1964 (Man); 5. Holland 1984 (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

Remarks: Holland (1984) re-examined Browns' (1944) specimens of *Trichopsylla asio asio* and found them to be *Megabothris asio megalopolis*.

*Megabothris atrox* (Jordan, 1925)

Syn.: *Ceratophyllus atrox* Jordan, 1925

Hosts: *Martes americana* (3)

*Mustela erminea* (4)

*M. vison* (5)

*Mustela* spp. (1, 2, 5)

*Spermophilus franklinii* (5)

Marten (5)

Mink (5)

Dist.: Alta, Man, Ont

Records: 1. Jordan 1925 (Alta); 2. Brown 1944 (Alta); 3. DeVos 1957 (Ont); 4. Wilson 1967 (Ont); 5. Holland 1984 (Alta, Man, Ont)

*Megabothris calcarifer gregsoni* Holland, 1950

Hosts: *C. rutilus* (2, 3)

*C. r. dawsoni* (1, 3)

*Clethrionomys* spp. (3)

*Dicrostonyx groenlandicus* (3)

*Dicrostonyx* spp. (3)

*Lemmus sibiricus* (1, 3)

- Lemmus* spp. (3)  
*Lepus americanus dalli* (3)  
*Microtus longicaudus* (3)  
*M. miurus* (3)  
*M. oeconomus* (3)  
*M. pennsylvanicus* (3)  
*M. p. drummondii* (1, 3)  
*M. xanthognathus* (3)  
*Microtus* spp. (1, 3)  
*Mustela erminea* (3)  
*M. nivalis rixosa* (3)  
*Peromyscus maniculatus* (3)  
*Synaptomys borealis* (3)  
Dist.: NWT, YT  
Records: 1. Holland 1950 (NWT); 2. Mitchell and Behn 1965 (NWT); 3. Holland 1984 (NWT, YT)
- Megabothris clantoni clantoni* Hubbard, 1949  
Syn.: *Megabothris obscurus* Holland, 1949  
Host: *Lagurus curtatus*  
Dist.: BC  
Record: Holland 1984
- Megabothris groenlandicus* (Wahlgren, 1903)  
Syn.: *Megabothris immitis* (Jordan)  
Hosts: *Clethrionomys rutilus* (2)  
*Dicrostonyx groenlandicus* (1)  
*D. g. kilangmiutak* (1)  
*D. g. richardsoni* (1, 2)  
*D. hudsonius* (2)  
*Dicrostonyx* spp. (1, 2)  
*Lemmus sibiricus* (2)  
*L. s. trimucronatus* (1, 2)  
*Lemmus* spp. (1, 2)  
*Microtus miurus* (2)  
*M. pennsylvanicus* (1, 2)  
*M. xanthognathus* (2)  
*Microtus* spp. (1, 2)  
*Mustela erminea* (1, 2)  
*Mustela* spp. (2)  
*Peromyscus* spp. (2)  
*Spermophilus parryi* (1, 2)  
*Synaptomys* spp. (2)  
Dist.: Man, Nfld, NWT, Que, YT  
Records: 1. Holland 1952a (Man, NWT, Que), 2. 1984 (Man, Nfld, NWT, Que, YT)
- Megabothris lucifer* (Rothschild, 1905)  
Syn.: *Ceratophyllus lucifer* Rothschild, 1905  
Hosts: *Clethrionomys richardsoni* (6)  
*Eutamias* spp. (6)  
*Microtus montanus canescens* (3, 6)  
*M. ochrogaster minor* (6)  
*M. pennsylvanicus* (6)  
*M. p. drummondii* (1, 4, 5)  
*Microtus* spp. (2, 6)  
*Mustela frenata* (5)  
*M. f. longicauda* (5)  
*M. f. nevadensis* (6)  
*Peromyscus maniculatus nebrascensis* (5)  
*Peromyscus* spp. (6)
- Spermophilus r. richardsonii* (5)  
*Synaptomys* spp. (6)  
Dist.: Alta, BC, Man, Sask  
Records: 1. Rothschild 1905 (Alta); 2. Wagner 1936 (BC); 3. Holland 1941a (BC); 4. Brown 1944 (Alta); 5. Holland 1949 (Alta, BC, Sask), 6. 1984 (Alta, BC, Man, Sask)
- Megabothris quirini* (Rothschild, 1905)  
Syn.: *Ceratophyllus quirini* Rothschild, 1905  
*Trichosylla quirini* (Rothschild, 1905)  
Hosts: *Blarina brevicauda* (18, 20)  
*B. b. manitobensis* (17)  
*Clethrionomys gapperi* (7, 8, 13, 14, 16, 18, 20)  
*C. g. athabascae* (7, 10, 20)  
*C. g. gapperi* (7, 12)  
*C. g. gaspaeus* (16)  
*C. g. loringi* (1, 6, 14, 20)  
*C. g. proteus* (12, 20)  
*C. g. saturatus* (1, 7)  
*C. g. ungava* (11, 12, 20)  
*C. rutilus* (20)  
*C. r. dawsoni* (9, 20)  
*Clethrionomys* spp. (20)  
*Dicrostonyx hudsonius* (11, 20)  
*Dicrostonyx* spp. (20)  
*Eutamias minimis* (14, 20)  
*E. m. borealis* (7, 14)  
*Eutamias* spp. (20)  
*Lemmus sibiricus* (20)  
*Mephitis m. mephitis* (7)  
*Microtus chrotorrhinus* (18)  
*M. longicaudus* (20)  
*M. l. vellerosus* (20)  
*M. ochrogaster* (20)  
*M. oeconomus* (20)  
*M. o. operarius* (20)  
*M. pennsylvanicus* (13, 14, 18, 20)  
*M. p. drummondii* (3, 5, 7, 10, 14, 20)  
*M. p. enixus* (11)  
*M. p. insperatus* (7)  
*M. p. labradorius* (20)  
*M. p. pennsylvanicus* (7)  
*Microtus* spp. (7, 20)  
*Mustela erminea* (7, 15, 20)  
*M. e. richardsonii* (20)  
*M. frenata longicauda* (7)  
*Napaeozapus insignis* (13, 18, 20)  
*N. i. frutectanus* (7)  
*N. i. insignis* (16, 20)  
*Napaeozapus* spp. (20)  
*Neotoma cinerea* (20)  
*Ochotona collaris* (20)  
*Peromyscus leucopus* (18, 20)  
*P. maniculatus* (7, 13, 16, 18, 20)  
*P. m. algidus* (20)  
*P. m. artemisiae* (7)  
*P. m. bairdii* (14, 20)  
*P. m. borealis* (7, 20)  
*Peromyscus* spp. (20)  
*Phenacomys intermedius celatus* (11, 20)



*Phenacomys* spp. (20)  
*Rattus norvegicus* (13)  
*Sorex cinereus* (20)  
*S. c. cinereus* (14, 20)  
*Spermophilus franklinii* (7)  
*S. parryii* (20)  
*Sylvilagus nuttallii grangeri* (7)  
*Synaptomys borealis* (19, 20)  
*S. cooperi* (19)  
*Tamiasciurus hudsonicus* (8, 14, 20)  
*T. h. columbiensis* (7)  
*T. h. gymnicus* (16)  
*T. h. hudsonicus* (7, 14)  
*T. h. laurentianus* (4)  
*Tamiasciurus* spp. (20)  
*Tamias striatus* (7, 20)  
*T. s. griseus* (20)  
*Zapus hudsonius* (8, 16, 18, 20)  
*Z. princeps* (20)  
*Z. p. minor* (7)  
*Zapus* spp. (7, 20)  
Unspecified (2)

Dist.: Alta, BC, Man, NB, Nfld, NS, NWT,  
Ont, Que, Sask, YT

Records: 1. Rothschild 1905 (Alta); 2. Jordan  
1929 (BC), 3. 1932 (BC); 4. Eidmann 1935  
(Que); 5. Wagner 1936 (BC); 6. Brown 1944  
(Alta); 7. Holland 1949 (Alta, BC, NWT, Ont);  
8. Hubbard 1949 (Ont); 9. Judd 1955 (NWT);  
10. Harper 1956 (NWT); 11. Gabbutt 1961  
(Nfld); 12. Harper 1961 (Nfld, Que); 13. Robert  
1962 (Que); 14. Buckner 1964 (Man); 15.  
Wilson 1967 (Ont); 16. Brown 1968 (NB); 17.  
Buckner and Blasko 1969 (Man); 18. Wright  
1979 (NS); 19. Whitaker and French 1982  
(NB); 20. Holland 1984 (Alta, BC, Man, NB,  
Nfld, NS, NWT, Ont, Que, Sask, YT)  
Remarks: Rothschild (1905) and Brown (1944)  
reported the hosts as *Eutamias gapperi* and *E.*  
*saturatus*. Holland (1984) felt that both were  
probably *Clethrionomys gapperi loringi*.

*Monopsyllus ciliatus protinus* (Jordan, 1929)

Hosts: *Eutamias amoenus* (3, 5)  
*E. a. felix* (3)  
*E. townsendii* (3, 5)  
*E. t. cooperi* (1, 2)  
*Eutamias* spp. (5)  
*Glaucmys sabrinus* (3)  
*G. s. oregonensis* (4)  
*Lepus americanus* (3, 5)  
*Marmota caligata* (5)  
*Martes americana caurina* (3)  
*Microtus oregoni serpens* (5)  
*Mustela erminea anguiniae* (3)  
*M. e. fallenda* (3)  
*Ochotona princeps* (5)  
*Ochotona* spp. (5)  
*Peromyscus maniculatus* (3, 5)  
*P. m. austerus* (3)  
*P. m. oreas* (3)  
*Peromyscus* spp. (5)

*Procyon* spp. (5)  
*Spilogale putorius gracilis* (3)  
*S. p. latifrons* (5)  
*S. p. phenax* (5)  
*Sylvilagus floridanus* (5)  
*Tamiasciurus douglasii* (5)  
*T. d. mollipilosus* (2, 3)  
*T. hudsonicus* (1, 5)  
*T. h. lanuginosus* (3, 5)  
*T. h. picatus* (5)  
*Tamiasciurus* spp. (3, 5)  
Field mouse (5)  
Red squirrel (5)  
Squirrel (5)  
Weasel (5)

Dist.: BC

Records: 1. Jordan 1929; 2. Wagner 1936a; 3.  
Holland 1949; 4. Spencer 1956; 5. Holland 1984

*Monopsyllus eumolpi* (Rothschild, 1905)

Syn.: *Ceratophyllus eumolpi* Rothschild, 1905

Hosts: *Clethrionomys gapperi* (4)

*Eutamias amoenus affinis* (1, 2, 4)  
*E. a. ludibundus* (4)  
*E. a. luteiventris* (4)  
*E. minimus borealis* (1, 4)  
*E. m. selkirkii* (4)  
*Eutamias* spp. (1, 4)  
*Mustela frenata* (4)  
*Ochotona princeps fenisex* (4)  
*Spermophilus c. columbianus* (3, 4)  
*Tamiasciurus hudsonicus* (4)  
*T. h. streatori* (2, 4)  
*Zapus princeps minor* (4)

Dist.: Alta, BC, Ont, Sask

Records: 1. Rothschild 1905 (Alta, BC); 2.  
Wagner 1936a (BC); 3. Holland 1944 (BC), 4.  
1949 (Alta, BC, Ont, Sask)

*Monopsyllus eumolpi eumolpi* (Rothschild, 1905)

Syn.: *Ceratophyllus eumolpi eumolpi*  
(Rothschild, 1905)

*Monopsyllus eumolpi canadensis*  
Hubbard, 1949

*Trichopsylla eumolpi eumolpi*  
(Rothschild, 1905)

Hosts: *Eutamias amoenus* (7)

*E. a. affinis* (7)  
*E. a. luteiventris* (7)  
*E. minimus* (3, 5, 6, 7)  
*E. m. borealis* (7)  
*E. m. minimus* (7)  
*Eutamias* spp. (2, 7)  
*Glaucmys sabrinus* (7)  
*Microtus oeconomus macfarlani* (7)  
*M. pennsylvanicus drummondii* (1)  
*Neotoma cinerea* (7)  
*Neotoma* spp. (7)  
*Ochotona princeps brooksi* (7)  
*Ochotona* spp. (7)  
*Peromyscus maniculatus* (7)  
*P. m. artemisiae* (7)

*Spermophilus columbianus* (7)  
*Tamiasciurus hudsonicus* (3, 7)  
*Tamiasciurus* spp. (7)  
*Tamias striatus* (3, 7)  
Chipmunk (4, 7)  
Red squirrel (7)

Dist.: Alta, BC, Man, NWT, Ont, Sask, YT  
Records: 1. Jordan 1932 (BC); 2. Brown 1944 (Alta); 3. Hubbard 1949a (Ont), 4. 1949b (Ont); 5. Buckner 1964 (Man); 6. Wilson 1967 (Ont); 7. Holland 1984 (Alta, BC, Man, NWT, Ont, Sask, YT)

Remarks: *Microtus oeconomus macfarlani* is given by Holland (1984) as *M. oregoni macfarlani*. The geographical record suggests *M. oeconomus macfarlani* is the proper classification.

*Monopsyllus thambus* (Jordan, 1929)

Syn.: *Ceratophyllus bakeri* Wagner, 1934  
*Ceratophyllus thambus* Jordan, 1929

Hosts: *Clethrionomys gapperi* (6)  
*C. rutilus* (6)  
*Lynx canadensis* (3)  
*Lynx* spp. (1)  
*Microtus* spp. (6)  
*Peromyscus maniculatus* (5,6)  
*P. m. algidus* (6)  
*P. m. borealis* (6)  
House mouse (2)  
Mouse (4, 6)

Dist.: Alta, BC, Nfld, NWT, Que, Sask, YT  
Records: 1. Jordan 1929 (Alta); 2. Wagner 1933 (Nfld); 3. Brown 1944 (Alta); 4. Holland 1944 (NWT), 5. 1949 (NWT, Sask), 6. 1984 (Alta, BC, Nfld, NWT, Que, YT)

*Monopsyllus tolli* (Wagner, 1901)

Hosts: *Eutamias minimus borealis* (2)  
*Ochotona collaris* (1, 2)

Dist.: YT

Records: 1. Holland 1952a, 2. 1984

*Monopsyllus vison* (Baker, 1904)

Syn.: *Ceratophyllus vison* (Baker, 1904)  
*Trichopsylla vison* Baker, 1904

Hosts: *Clethrionomys gapperi* (15, 16)  
*C. g. loringi* (16)  
*C. rutilus* (16)  
*C. r. dawsoni* (16)  
*Clethrionomys* spp. (16)  
*Eutamias minimus borealis* (16)  
*Eutamias* spp. (3)  
*Glaucomys sabrinus* (16)  
*Glaucomys* spp. (16)  
*Lepus americanus* (8)  
*Lepus* spp. (16)  
*Lynx canadensis* (11)  
*Martes americana* (7, 16)  
*M. a. americana* (14)  
*Mephitis mephitis* (16)  
*Microtus longicaudus* (16)

*M. pennsylvanicus* (16)  
*Microtus* spp. (16)  
*Mustela erminea* (12, 16)  
*M. e. arctica* (16)  
*M. e. cicognanii* (16)  
*M. e. invicta* (16)  
*M. frenata* (2)  
*M. vison* (16)  
*M. v. energumenos* (16)  
*Mustela* spp. (16)  
*Peromyscus leucopus* (15)  
*P. maniculatus* (15, 16)  
*Peromyscus* spp. (16)  
*Procyon lotor* (15, 16)  
*Sciurus carolinensis* (16)  
*Spermophilus c. columbianus* (16)  
*S. parryii plesius* (16)  
*Spermophilus* spp. (16)  
*Tamiasciurus hudsonicus* (3, 4, 5, 6, 8, 9, 10, 13, 15, 16)  
*T. h. baileyi* (16)  
*T. h. columbiensis* (16)  
*T. h. gymnicus* (5)  
*T. h. hudsonicus* (16)  
*T. h. minnesota* (16)  
*T. h. picatus* (16)  
*T. h. preblei* (16)  
*T. h. richardsoni* (16)  
*T. h. streator* (2, 16)  
*T. h. ungavensis* (16)  
*Tamiasciurus* spp. (16)  
*Tamias striatus* (8)  
*Vulpes vulpes* (16)  
Red squirrel (16)  
Short-tailed weasel (16)  
Squirrel (5, 16)  
Weasel (16)  
Unspecified (1)

Dist.: Alta, BC, Man, Nfld, NB, NS, NWT, Ont, Que, Sask, YT  
Records: 1. Jordan 1929 (Alta, BC); 2. Wagner 1936a (BC); 3. Brown 1944 (Alta); 4. Hubbard 1949 (Ont); 5. Brown 1955 (NB); 6. Judd 1955 (NWT); 7. DeVos 1957 (Ont); 8. Scholten et al. 1962 (Ont); 9. Buckner 1964 (Man); 10. Mitchell and Behin 1965 (NWT); 11. van Zyll De Jong 1966 (Alta); 12. Wilson 1967 (Ont); 13. Mahr and Chai 1972 (Alta); 14. Holland 1979 (Ont); 15. Wright 1979 (NS); 16. Holland 1984 (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Monopsyllus wagneri ophidius* (Jordan)

Hosts: *Microtus oregoni serpens*  
*Microtus* spp.  
*Peromyscus maniculatus*  
*P. m. austerus*  
*P. m. oreas*  
*Peromyscus* spp.  
*Tamiasciurus douglasii*

Dist.: BC

Record: Holland 1984

*Monopsyllus wagneri systaltus* (Jordan)  
 Hosts: *Blarina brevicauda manitobensis* (3)  
*Clethrionomys gapperi* (2, 4)  
*C. g. loringi* (4)  
*Clethrionomys* spp. (4)  
*Dipodomys ordii* (4)  
*Lagurus curtatus* (4)  
*Microtus ochrogaster* (4)  
*M. pennsylvanicus* (4)  
*Microtus* spp. (4)  
*Mus musculus* (4)  
*Peromyscus maniculatus* (2, 4)  
*P. m. bairdii* (4)  
*P. m. nebrascensis* (4)  
*Peromyscus* spp. (1, 4)  
*Sorex arcticus* (2, 4)  
*S. cinereus* (2, 4)  
*Zapus* spp. (4)  
 House mouse (4)  
 Dist.: Alta, Man, Ont, Sask  
 Records: 1. Brown 1944 (Alta); 2. Buckner 1964 (Man); 3. Buckner and Blasko 1969 (Man); 4. Holland 1984 (Alta, Man, Ont, Sask)

*Monopsyllus wagneri wagneri* (Baker, 1904)  
 Hosts: *Eutamias* spp. (2)  
*Microtus* spp. (2)  
*Mustela frenata arizonensis* (1)  
*Neotoma cinerea drummondii* (2)  
*Neotoma* spp. (2)  
*Peromyscus maniculatus* (2)  
*P. m. alpinus* (2)  
*P. m. artemisiae* (2)  
*P. m. borealis* (2)  
*P. m. maniculatus* (2)  
*Peromyscus* spp. (1, 2)  
*Synaptomys borealis* (2)  
*Synaptomys* spp. (2)  
*Tamiasciurus hudsonicus* (2)  
*Thomomys talpoides* (2)  
*Zapus* spp. (2)  
 Mice (2)  
 Rabbit (2)  
 Weasel (2)

Dist.: Alta, BC  
 Records: 1. Wagoner 1936a (BC); 2. Holland 1984 (Alta, BC)

*Nosopsyllus fasciatus* (Bosc, 1801) Jordan, 1933  
 Syn.: *Ceratophyllus canadensis* Baker, 1904  
*Ceratophyllus fasciatus* (Bosc, 1801)  
*Pulex fasciatus* Bosc, 1801  
 Hosts: *Blarina brevicauda* (11)  
*Clethrionomys gapperi* (11)  
*Microtus p. pennsylvanicus* (6)  
*M. townsendii tetramerus* (11)  
*Mus musculus* (5)  
*Peromyscus maniculatus* (7)  
*Rattus norvegicus* (2, 3, 4, 5, 7, 8, 9, 10, 11)  
*R. rattus alexandrinus* (5)  
*R. r. rattus* (5)

*Rattus* spp. (7, 11)  
*Sorex* spp. (7)  
*Tamiasciurus douglasii mollipilosus* (7)  
 Mice (7)  
 Unspecified (1)  
 Dist.: BC, Man, NB, Nfld, NS, Ont, Que, Sask  
 Records: 1. Baker 1904 (Ont); 2. Spencer 1937 (BC); 3. 1939b (BC); 4. Holland 1940c (BC), 5. 1941b (BC); 6. Baker 1946 (Que); 7. Holland 1949 (BC, Ont, Que, Sask); 8. Judd 1950 (Ont); 9. Brown 1968 (NB); 10. Wright 1979 (NS); 11. Holland 1984 (BC, Man, Nfld, NS, Ont, Que)

*Opisocrostitis bruneri* (Baker, 1895)  
 Syn.: *Ceratophyllus bruneri* (Baker, 1904)  
*Ceratophyllus saundersi* (Jordan, 1933)  
*Oropsylla bruneri* (Baker, 1904)  
*Pulex bruneri* Baker, 1895  
 Hosts: *Eutamias minimus borealis* (5)  
*Marmota monax* (6)  
*Microtus pennsylvanicus* (10)  
*Spermophilus columbianus* (3)  
*S. franklinii* (2, 5, 6, 9, 10)  
*S. richardsonii* (1, 2, 4, 5, 6, 7, 10)  
*S. r. richardsonii* (10)  
*S. tridecemlineatus* (2, 3, 4, 5, 6, 8, 10)  
*S. t. tridecemlineatus* (4, 7, 10)  
*Tamiasciurus hudsonicus* (8)  
*T. h. hudsonicus* (7, 10)  
*Taxidea taxus* (5, 10)  
 Bush rabbit (5)  
 Dist.: Alta, Man, Sask  
 Records: 1. Jordan 1933 (Sask); 2. McLeod 1933 (Man); 3. Holland 1943 (Alta); 4. Brown 1944 (Alta); 5. Holland 1944 (unspecified), 6. 1949 (Alta, Man, Sask); 7. 1952a (Sask); 8. Buckner 1964 (Man); 9. Hilton and Mahrt 1971 (Alta); 10. Holland 1984 (Alta, Man, Sask)

*Opisocrostitis labis* (Jordan and Rothschild, 1922)  
 Syn.: *Ceratophyllus labis* Jordan and Rothschild, 1922

Hosts: *Cynomys ludovicianus* (7)  
*C. l. ludovicianus* (5)  
*Mustela frenata longicauda* (1, 3, 5)  
*Spermophilus franklinii* (5)  
*S. richardsonii* (2, 4, 5, 6, 7)  
*S. r. richardsonii* (7)  
*Taxidea t. taxus* (5)  
 Ground squirrels (2)

Dist.: Alta, Sask  
 Records: 1. Jordan and Rothschild 1922 (Alta); 2. Gibbons and Humphreys 1941 (Alta); 3. Brown 1944 (Alta); 4. Holland 1944 (Alta, Sask); 5. 1949 (Alta, Sask); 6. Hilton and Mahrt 1971 (Alta); 7. Holland 1984 (Alta, Sask)

*Opisocrostitis tuberculatus tuberculatus* (Baker, 1904)  
 Syn.: *Ceratophyllus tuberculatus* Baker, 1904  
*Oropsylla tuberculata tuberculata* (Baker, 1904)



Hosts: *Cynomys l. ludovicianus* (5)  
*Lepus* spp. (3)  
*Microtus* spp. (7)  
*Ochotona collaris* (7)  
*Spermophilus columbianus* (3, 6, 7)  
*S. c. columbianus* (1, 4, 5)  
*S. franklinii* (4)  
*S. parryii* (7)  
*S. richardsonii* (3, 5, 6, 7)  
*S. r. richardsonii* (2, 4, 7)  
*S. tridecemlineatus* (5)  
*S. t. tridecemlineatus* (4)  
*Tamiasciurus hudsonicus* (7)

Dist.: Alta, BC, Sask, YT

Records: 1. Holland 1940c (Alta); 2. Gibbons and Humphreys 1941 (Alta); 3. Brown 1944 (Alta); 4. Holland 1944 (Alta, BC, Sask), 5. 1949 (Alta, BC, Sask); 6. Hilton and Mahrt 1971 (Alta); 7. Holland 1984 (Alta, BC, Sask, YT)

*Opisodasys keeni keeni* (Baker, 1896)

Syn.: *Pulex keeni* Baker, 1896

Hosts: *Clethrionomys gapperi* (4)

*Clethrionomys* spp. (3, 4)

*Eutamias* spp. (4)

*Microtus longicaudus* (4)

*M. oregoni serpens* (3, 4)

*M. townsendii* (4)

*M. t. townsendii* (3)

*Microtus* spp. (3)

*Neotoma cinerea* (4)

*Peromyscus maniculatus* (2, 3)

*P. m. alpinus* (3, 4)

*P. m. artemisiae* (3, 4)

*P. m. austerus* (3, 4)

*P. m. borealis* (3)

*P. m. interdictus* (3)

*P. m. keeni* (1, 3)

*P. m. oreas* (3, 4)

*P. sitkensis* (4)

*Peromyscus* spp. (3, 4)

*Zapus* spp. (3)

Chipmunk (4)

Weasel (3)

Dist.: Alta, BC

Records: 1. Baker 1896 (BC); 2. Wagner 1936a (BC); 3. Holland 1949 (Alta, BC), 4. 1984 (Alta, BC)

*Opisodasys pseudarctomys* (Baker, 1904)

Syn.: *Ceratophyllus pseudarctomys* Baker, 1904

Hosts: *Clethrionomys gapperi* (3)

*Glaucomys sabrinus* (1, 3, 5, 6, 9, 10)

*G. s. alpinus* (2)

*G. s. canescens* (7, 10)

*G. s. columbiensis* (3, 10)

*G. s. macrotis* (3, 8)

*G. s. makkovikensis* (4)

*G. volans* (10)

*Glaucomys* spp. (3, 10)

*Lynx rufus* (10)

*Microtus pennsylvanicus* (10)

*Mustela frenata noveboracensis* (10)

*Tamiasciurus hudsonicus* (3, 5, 6, 10)

*T. h. streator* (3)

Dist.: Alta, BC, Man, NB, Nfld, NS, Ont, Que  
Records: 1. Rothschild 1905 (BC); 2. Holland 1941a (BC), 3. 1949 (Alta, Ont); 4. Harper 1961 (Nfld); 5. Robert 1962 (Que); 6. Scholten et al. 1962 (Ont); 7. Buckner 1964 (Man); 8. Brown 1968 (NB); 9. Wright 1979 (NS); 10. Holland 1984 (Alta, BC, Man, NS, Ont, Que)

Remarks: Holland (1984) used *Lynx fasciatus pallidus* instead of *Lynx rufus*.

*Opisodasys vesperalis* (Jordan, 1929)

Syn.: *Ceratophyllus vesperalis* Jordan, 1929

Hosts: *Glaucomys sabrinus* (3, 4, 6)

*G. s. alpinus* (2, 4)

*G. s. columbiensis* (1, 4, 6)

*G. s. fuliginosus* (4)

*G. s. oregonensis* (5, 6)

*Lepus americanus columbiensis* (6)

*Lynx canadensis* (4)

*Tamiasciurus douglasii* (6)

Weasel (4)

Dist.: BC

Records: 1. Jordan 1929; 2. Wagner 1940; 3. Holland 1941, 4. 1949; 5. Spencer 1956; 6. Holland 1984

Remarks: According to Holland (1984), Wagner (1940) identified the specimen as *Opisodasys pseudarctomys* by mistake.

*Orchopeas caedens* (Jordan, 1925)

Hosts: *Martes americana* (1)

*Tamiasciurus hudsonicus* (2, 3)

Dist.: Alta, NWT, Ont

Remarks: 1. Brown 1944 (Alta); 2. Judd 1955 (NWT); 3. Scholten et al. 1962 (Ont)

*Orchopeas caedens caedens* (Jordan, 1925)

Syn.: *Ceratophyllus caedens* (Jordan, 1925)

Hosts: *Eutamias* spp. (6)

*Glaucomys sabrinus* (4, 6)

*Glaucomys* spp. (6)

*Martes americana* (1, 6)

*M. a. actuosa* (6)

*Mustela erminea* (6)

*M. e. cicognanii* (6)

*M. e. invicta* (6)

*M. e. richardsonii* (6)

*M. frenata longicauda* (6)

*M. vison* (2, 6)

*Peromyscus maniculatus* (6)

*Spermophilus franklinii* (2)

*S. parryii* (6)

*Tamiasciurus hudsonicus* (2, 3, 4, 5, 6)

*T. h. preblei* (2)

*Tamiasciurus* spp. (6)

*Vulpes vulpes* (2)

Pine marten (6)

Red squirrel (6)

Tree squirrel (6)

Weasel (2, 6)

Dist.: Alta, BC, Man, Nfld, NWT, Que, Sask, YT

Records: 1. Jordan 1925 (Alta); 2. Holland 1949 (Alta, BC, NWT, Sask, YT); 3. Gabbutt 1961 (Nfld); 4. Buckner 1964 (Man); 5. Mahrt and Chai (Alta); 6. Holland 1984 (Alta, BC, Man, Que, YT)

*Orchopeas caedens durus* (Jordan, 1929)

Syn.: *Ceratophyllus caedens durus* Jordan, 1929

Hosts: *Clethrionomys gapperi* (12)

*Clethrionomys* spp. (15)

*Eutamias amoenus* (4)

*Eutamias* spp. (6)

*Glaucomys sabrinus* (6, 14, 15)

*Glaucomys* spp. (15)

*Lynx canadensis* (6)

*L. rufus* (15)

*Martes americana* (6, 15)

*M. a. actiosa* (15)

*M. a. americana* (13)

*Mephitis m. mephitis* (6)

*Mustela erminea* (6, 11, 15)

*M. e. cicognanii* (15)

*M. e. richardsonii* (12)

*M. frenata* (1)

*M. f. arizonensis* (5, 15)

*M. f. nevadensis* (4)

*M. vison* (7)

*Mustela* spp. (1, 6, 15)

*Peromyscus maniculatus* (14)

*P. m. abietorum* (12)

*Sciurus carolinensis* (12, 15)

*Tamiasciurus douglasii* (15)

*T. d. mollipilosus* (4, 15)

*T. hudsonicus* (1, 2, 6, 14)

*T. h. columbiensis* (6)

*T. h. gymnicus* (8, 12)

*T. h. hudsonicus* (6, 15)

*T. h. preblei* (9)

*T. h. streatorum* (1, 4, 6, 15)

*T. h. ungavensis* (10)

*Tamiasciurus* spp. (15)

*Tamias striatus* (15)

*Vulpes vulpes* (15)

Chipmunk (15)

Red squirrel (3)

Squirrel (15)

Weasel (3, 15)

Dist.: Alta, BC, NB, Nfld, NS, NWT, Ont, Que, Sask

Records: 1. Jordan 1929 (BC), 2. 1932 (BC); 3. Spencer 1936 (BC); 4. Wagner 1936 (BC); 5. Holland 1938 (BC), 6. 1949 (BC, Nfld, NWT); 7. Judd 1954a (Ont); 8. Brown 1955 (NB); 9. Harper 1956 (NWT), 10. 1961 (Nfld, Que); 11. Wilson 1967 (Ont); 12. Brown 1968 (NB); 13. Holland 1979 (Ont); 14. Wright 1979 (NS); 15.

Holland 1984 (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)

Remarks: Wagner's (1936) record from *T. d. mollipilosus* is possibly a misidentification (Holland 1984).

*Orchopeas howardi howardi* (Baker, 1895)

Syn.: *Orchopeas wickhami* (Baker, 1895)

Hosts: *Glaucomys volans* (5)

*G. v. volans* (1, 3, 5)

*Sciurus carolinensis* (5)

*S. niger* (5)

*Sciurus* spp. (5)

*Tamiasciurus hudsonicus* (4, 5)

*T. h. gymnicus* (2)

*T. h. loquax* (1)

*Tamias striatus lysteri* (1)

Dist.: Alta, Ont, Que

Records: 1. Jameson 1943 (Ont); 2. Baker 1944 (Que); 3. Holland 1949 (Ont); 4. Hubbard 1949a (Ont); 5. Holland 1984 (Alta, Ont)

*Orchopeas leucopus* (Baker, 1904)

Syn.: *Ceratophyllus leucopus* Baker, 1904

Hosts: *Blarina brevicauda* (6)

*B. b. talpoides* (4)

*Blarina* spp. (19)

*Clethrionomys gapperi* (4, 12, 19)

*C. g. gapperi* (4)

*C. g. loringi* (1, 3, 14, 19)

*C. g. ochraceus* (10)

*C. rutilus* (19)

*Clethrionomys* spp. (19)

*Glaucomys sabrinus macrotis* (4)

*G. volans* (19)

*G. v. volans* (19)

*Glaucomys* spp. (19)

*Microtus c. chrotorhinus* (4)

*M. pennsylvanicus* (4, 12, 19)

*M. p. drummondii* (14, 19)

*M. p. pennsylvanicus* (4)

*Microtus* spp. (4, 19)

*Mus musculus* (4, 19)

*Napaeozapus insignis* (12)

*Ondatra z. zibethicus* (4)

*P. leucopus* (17, 19)

*P. l. noveboracensis* (2, 4)

*P. maniculatus* (4, 5, 12, 13, 14, 15, 18, 19)

*P. m. abietorum* (10)

*P. m. algidus* (19)

*P. m. bairdii* (4, 12, 19)

*P. m. borealis* (1, 3, 4, 11, 19)

*P. m. gracilis* (4)

*P. m. nebracensis* (4)

*Peromyscus* spp. (4, 7, 8, 9, 16, 19)

*Rattus* spp. (19)

*Sorex cinereus* (19)

*S. c. cinereus* (14)

*Synaptomys* spp. (12, 19)

*Tamiasciurus hudsonicus* (12)

*T. h. hudsonicus* (12, 16)

*Tamias striatus* (4, 12)

*Tamias* spp. (19)

Mice (4)

Dist.: Alta, BC, Man, NB, Nfld, NS, NWT,  
Ont, Que, Sask, YT

Records: 1. Rothschild 1905 (Alta); 2. Jameson  
1943 (Ont); 3. Brown 1944 (Alta); 4. Holland  
1949 (Alta, BC, Man, NWT, Ont, Que, Sask,  
YT); 5. Hubbard 1949a (Ont); 6. Jameson 1950  
(Ont); 7. Judd 1950 (Ont), 8. 1953 (Ont), 9.  
1954a (Ont); 10. Brown 1955 (NB); 11. Judd  
1955 (NWT); 12. Robert 1962 (Que); 13.  
Scholten et al. 1962 (Ont); 14. Buckner 1964  
(Man); 15. Brown 1968 (NB); 16. Buckner and  
Blasko 1969 (Man); 17. Wright 1979 (NS); 18.  
Whitaker and French 1982 (NB); 19. Holland  
1984 (Alta, BC, Man, NB, Nfld, NS, NWT,  
Ont, Que, Sask)

Remarks: Brown (1944) and Rothschild (1905)  
reported their hosts as *Evotomys gapperi*  
*saturatus* and *Evotomys saturatus*, respectively.  
Holland (1984) reported *Peromyscus* sp. and *P.*  
*arcticus*. The validity of *P. arcticus* is uncertain  
so we have included both under *Peromyscus*  
spp.

*Orchopeas nepos* (Rothschild, 1905)

Hosts: *Glaucomyus sabrinus oregonensis* (3)

*Mustela erminea fallenda* (3)

*M. vison energumenos* (3)

*Sciurus carolinensis* (4)

*Spilogale putorius* (1, 3)

*Tamiasciurus douglasii* (4)

*T. d. mollipilosus* (2, 3)

*Tamiasciurus* spp. (4)

Weasel (3, 4)

Dist.: BC

Records: 1. Rothschild 1905; 2. Wagner 1936a;  
3. Holland 1949, 4. 1984

Remarks: Holland (1949) records *Spilogale*  
*putorius* as *S. gracilis olympica*.

*Orchopeas sexdentatus agilis* (Rothschild, 1905)

Syn.: *Ceratophyllus agilis* Rothschild, 1905

Hosts: *Clethrionomys gapperi* (7)

*C. g. saturatus* (5)

*Eutamias minimus* (7)

*Lepus americanus columbiensis* (7)

*Lynx* spp. (7)

*Martes americana* (7)

*Microtus longicaudus* (5)

*Mustela frenata* (1, 5, 7)

*M. f. arizonensis* (7)

*M. f. longicauda* (4)

*M. f. nevadensis* (2, 7)

*M. vison energumenos* (7)

*Neotoma cinerea* (1, 4, 6, 7)

*N. c. cinerea* (7)

*N. c. drummondii* (7)

*N. c. occidentalis* (2, 3, 5, 7)

*Neotoma* spp. (7)

*Ochotona princeps* (1, 2, 4, 5, 7)

*O. p. brooksi* (7)

*Ochotona* spp. (7)

*Peromyscus* spp. (7)

*Sciurus* spp. (7)

*Spilogale putorius* (5)

*Sylvilagus n. nuttallii* (5)

*Tamiasciurus hudsonicus* (7)

*T. h. preblei* (1, 7)

*T. h. richardsoni* (4)

Skunk (7)

Weasel (5, 7)

Wood rat (7)

Dist.: Alta, BC, YT

Records: 1. Rothschild 1905 (Alta, BC); 2.  
Wagner 1936 (BC); 3. Holland 1938 (BC); 4.  
Brown 1944 (Alta); 5. Holland 1949 (BC), 6.  
1952b (Alta), 7. 1984 (Alta, BC, YT)

Remarks: Holland (1949) records *Spilogale*  
*putorius* as *S. gracilis olympica*. Holland's  
(1952) specimens were taken from the nest of *N.*  
*cinerea*. Holland (1984) records four hosts:  
*Mustela frenata arizonensis* (= *M. arizonensis*)  
and *Neotoma cinerea occidentalis* (= *N. c.*  
*saxamans*).

*Oropsylla alaskensis* (Baker, 1904)

Syn.: *Ceratophyllus alaskensis* Baker, 1904

Hosts: *Alopex lagopus* (4)

*A. l. lagopus* (2, 4)

*Dicrostonyx* spp. (4)

*Lynx canadensis* (4)

*Mustela erminea arctica* (2)

*Spermophilus parryii* (4)

*S. p. parryii* (1, 3)

*Spermophilus* spp. (1, 4)

Ground squirrel (4)

Dist.: NWT, YT

Records: 1. Holland 1944 (NWT); 2. Jellison  
1945 (NWT); 3. Holland 1949 (NWT), 4. 1984  
(NWT, YT)

*Oropsylla arctomys* (Baker, 1904)

Syn.: *Atheopsylla septentrionalis* Stewart and  
Holland, 1940

*Ceratophyllus arctomys* Baker, 1904

Hosts: *Alopex l. lagopus* (17)

*Canis latrans* (5, 17)

*Glaucomyus volans* (17)

*Marmota caligata* (6)

*M. c. okanagona* (5)

*M. monax* (6, 10, 13, 16, 17)

*M. m. canadensis* (11, 12, 17)

*M. m. petrensis* (1, 2, 3, 5)

*M. m. rufescens* (6, 8, 17)

*Marmota* spp. (5, 7, 17)

*Martes americana* (17)

*M. a. americana* (15)

*M. pennanti* (17)

*M. p. pennanti* (6, 17)

*Mephitis m. mephitis* (6)

*Mephitis* spp. (17)

*Peromyscus maniculatus* (17)



*Spermophilus columbianus* (17)

*S. franklinii* (17)

*Spermophilus richardsonii* (4)

*Sylvilagus* spp. (6)

*Tamiasciurus hudsonicus* (17)

*Taxidea t. taxus* (6)

*Ursus americanus* (14)

*Vulpes vulpes* (6, 9, 11, 17)

Bear (6)

Dist.: Alta, BC, Man, NB, NS, NWT, Ont, Que, Sask

Records: 1. Wagner 1936 (BC); 2. Stewart and Holland 1940 (BC); 3. Holland 1949a (BC); 4. Brown 1944 (Alta); 5. Jellison 1945 (BC, Ont, Sask); 6. Holland 1949 (Alta, BC, Man, NB, Ont, Que, Sask); 7. Hubbard 1949 (Ont); 8. Judd 1950 (Ont), 9. 1953 (Ont); 10. Scholten et al. 1962 (Ont); 11. Buckner 1964 (Man); 12. Brown 1968 (NB); 13. Ko 1972b (Ont); 14. Addison et al. 1978 (Ont); 15. Holland 1979 (Ont); 16. Wright 1979 (NS); 17. Holland 1984 (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Remarks: Holland (1984) recorded the host as *Spermophilus columbianus albertae*. The validity of *S. c. albertae* is uncertain so we included it under *S. columbianus*.

*Oropsylla idahoensis* (Baker, 1904)

Syn.: *Ceratophyllus idahoensis* Baker, 1904

*Ceratophyllus poeantisi* Rothschild, 1905

Hosts: *Eutamias townsendii* (8)

*Eutamias* spp. (8)

*Marmota flaviventris avara* (8)

*Marmota* spp. (1)

*Microtus longicaudus* (6)

*Mustela frenata* (8)

*M. f. longicauda* (1)

*M. f. oribasus* (6)

*Mustela* spp. (8)

*Ochotona collaris* (8)

*O. princeps* (8)

*O. p. princeps* (6)

*Spermophilus columbianus* (1, 2, 3, 5, 6, 7, 8)

*S. c. columbianus* (4, 6, 8)

*S. lateralis* (5, 8)

*S. l. tesorum* (1, 3, 6)

*S. parryii* (8)

*S. p. plesius* (8)

*S. richardsonii* (7)

*S. r. richardsonii* (6)

*S. saturatus* (6, 8)

*S. tridecemlineatus* (6)

*Spermophilus* spp. (4, 8)

*Thomomys talpoides andersoni* (6)

*Thomomys* spp. (8)

Dist.: Alta, BC, YT

Records: 1. Rothschild 1905 (Alta, BC); 2. Wagner 1936a (BC); 3. Brown 1944 (Alta); 4. Holland 1944 (Alta, BC); 5. Jellison 1945 (Alta, BC); 6. Holland 1949 (Alta, BC); 7. Hilton and Mahrt 1971 (Alta); 8. Holland 1984 (Alta, BC, YT)

*Oropsylla rupestris* (Jordan, 1929)

Hosts: *Canis* spp. (1)

*Cynomys l. ludovicianus* (7)

*Lepus townsendii campanius* (7)

*Mustela frenata longicauda* (1, 4, 7)

*Mustela* spp. (2, 6)

*Peromyscus* spp. (9)

*Rattus norvegicus* (5, 9)

*Spermophilus franklinii* (7)

*S. parryii* (9)

*S. richardsonii* (1, 2, 4, 6, 7, 8, 9)

*S. r. richardsonii* (3, 5, 9)

*Spermophilus* spp. (5)

*Taxidea taxus* (4)

*Thomomys* spp. (1, 2, 4)

Weasel (9)

Dist.: Alta, Man, Sask, YT

Records: 1. Jordan 1929 (Alta); 2. Wagner 1936a (Alta); 3. Gibbons and Humphreys 1941 (Alta); 4. Brown 1944 (Alta); 5. Holland 1944 (Sask); 6. Jellison 1945 (Alta, Sask); 7. Holland 1949 (Alta, Man, Sask); 8. Hilton and Mahrt 1971 (Alta); 9. Holland 1984 (Alta, Man, Sask, YT)

Remarks: Holland (1984) recorded both *Spermophilus parryii* and *S. undulatus*.

*Tarsopsylla octodecimdentata coloradensis* (Baker, 1895)

Syn.: *Ceratophyllus coloradensis* Baker, 1904

*Pulex coloradensis* Baker, 1895

*Tarsopsylla coloradensis* Jordan, 1933

Hosts: *Glaucomyces sabrinus* (2, 5)

*G. s. alpinus* (1)

*Lynx rufus* (5)

*Martes americana* (2, 5)

*M. a. americana* (4)

*Tamiasciurus hudsonicus* (2, 3, 5)

*Tamiasciurus* spp. (5)

Squirrel (5)

Dist.: Alta, BC, Man, NWT, Ont, Sask, YT

Records: 1. Holland 1941a (BC), 2. 1949 (Alta, BC, NWT); 3. Mahrt and Chai 1972 (Alta); 4. Holland 1979 (Ont), 5. 1984 (Alta, BC, Man, NWT, Ont, Sask, YT)

*Thrassis acamantis* (Rothschild, 1905)

Syn.: *Ceratophyllus acamantis* Rothschild, 1905

Syn.: *Oropsylla acamantis*

Hosts: *Canis latrans* (1)

*Eutamias* spp. (5)

*Marmota flaviventris* (2, 8)

*M. f. avara* (1, 3, 4, 5, 6, 7, 8)

*M. vancouverensis* (3)

*Marmota* spp. (5, 8)

*Mephitis mephitis* (1)

*Mustela vison energumenos* (1)

*Peromyscus* spp. (8)

*Spermophilus c. columbianus* (3)

*Synaptomys* spp. (8)

*Tamiasciurus hudsonicus streatoris* (5)

Chipmunk (8)  
Groundhog (8)  
Skunk (8)  
Weasel (8)

Dist.: Alta, BC

Record: 1. Rothschild 1905 (BC); 2. Wagner 1936a (BC); 3. Spencer 1936 (BC); 4. Holland 1938 (BC); 5. Brown 1944 (Alta); 6. Holland 1944 (BC), 7. 1949 (BC), 8. 1984 (Alta, BC)

Remarks: Rothschild's (1905) specimens of *T. acamantis* from *Canis latrans* and *Mustela vison ergumenos* may possibly be *Thrassis spenceri spenceri* (Holland 1984).

*Thrassis bacchi bacchi* (Rothschild, 1905)

Syn.: *Ceratophyllus bacchi* Rothschild, 1905

*Oropsylla bacchi*

*Thrassis gladiolis gladiolis* (Jordan)

Hosts: *Cynomys ludovicianus* (5)

*C. l. ludovicianus* (4)

*Mustela frenata longicauda* (4)

*Spermophilus franklinii* (3, 5)

*S. richardsonii* (5)

*S. r. richardsonii* (3, 4)

*S. tridecemlineatus* (1, 2, 4, 5)

*S. t. tridecemlineatus* (3)

Weasel (5)

Dist.: Alta, Man, Sask

Records: 1. Rothschild 1905 (Alta); 2. Brown 1944 (Alta); 3. Holland 1944 (Alta, Sask); 4. 1949 (Alta, Man, Sask), 5. 1984 (Alta, Man, Sask)

*Thrassis petiolatus* (Baker, 1904)

Syn.: *Ceratophyllus petiolatus* Baker, 1904

Hosts: *Eutamias* spp. (5)

*Microtus pennsylvanicus* (5)

*Spermophilus columbianus* (2, 4, 5)

*S. c. columbianus* (3)

*S. lateralis* (5)

*S. richardsonii* (5)

*Spermophilus* spp. (5)

*Thomomys* spp. (1)

Dist.: Alta, BC

Records: 1. Jordan 1929 (BC); 2. Brown 1944 (Alta); 3. Holland 1944 (BC), 4. 1949 (Alta, BC), 5. 1984 (Alta, BC)

*Thrassis spenceri spenceri* Wagner, 1936

Syn.: *Diamanus montanus* Holland, 1941

*Thrassis acamantis* Spencer, 1936

*Thrassis spenceri vancouverensis* Stark, 1957

Hosts: *Gulo luscus* (3)

*Marmota caligata* (4, 6)

*M. c. cascadenis* (4)

*M. c. okanagan* (2, 4, 6)

*M. monax* (6)

*M. m. petrensis* (4)

*M. vancouverensis* (4, 5, 6)

*Marmota* spp. (1, 4, 6)

Dist.: Alta, BC

Records: 1. Spencer 1936a (BC); 2. Wagner 1936a (BC); 3. Holland 1941a (BC), 4. 1949 (Alta, BC); 5. Stark 1957 (BC); 6. Holland 1984 (Alta, BC)

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*Anomiopsyllus montanus* Collins, 1936

Host: *Neotoma cinerea*

Dist.: Alta

Records: Holland 1952, 1984

*Atyphloceras bishopi* Jordan, 1933

Syn.: *Saphiopsylla bishopi* (Jordan, 1933)

Hosts: *Blarina brevicauda* (3)

*B. b. talpoides* (2)

*Clethrionomys gapperi* (6)

*C. g. loringi* (5)

*C. g. proteus* (4, 6)

*Clethrionomys* spp. (6)

*Microtus chrotorrhinus* (6)

*M. pennsylvanicus* (4, 6)

*M. p. pennsylvanicus* (1, 2)

*Microtus* spp. (6)

*Peromyscus maniculatus gracilis* (1)

Dist.: Man, Nfld, Ont, Que

Records: 1. Baker 1946 (Que); 2. Holland 1949 (Ont); 3. Jameson 1950 (Ont); 4. Hopkins and Rothschild 1962 (Nfld, Ont, Que); 5. Buckner and Blasko 1969 (Man); 6. Holland 1984 (Man, Nfld, Ont, Que)

*Atyphloceras multidentatus multidentatus* (Fox, 1909)

Syn.: *Atyphloceras artius* Jordan, 1933

Hosts: *Microtus oregoni serpens* (2, 3)

*M. townsendii tetramerus* (3)

*Peromyscus maniculatus* (2)

*P. m. austerus* (2)

*Peromyscus* spp. (1, 3)

*Rattus norvegicus* (2)

*Spilogale putorius gracilis* (2)

*Tamiasciurus hudsonicus streator* (2)

*Tamiasciurus* spp. (3)

Dist.: BC

Records: 1. Jordan 1933; 2. Holland 1949, 3. 1984

*Callistopsyllus terinus campestris* Holland, 1949

Syn.: *Callistopsyllus campestris* Holland, 1949

Hosts: *Peromyscus maniculatus nebrascensis* (1)

*Peromyscus* spp. (2, 3)

Dist.: Alta, Sask

Records: 1. Holland 1949 (Alta, Sask); 2. Hopkins and Rothschild 1962 (Alta); 3. Holland 1984 (Alta)

*Callistopsyllus terinus terinus* (Rothschild, 1905)

Syn.: *Ceratophyllus terinus* Rothschild, 1905

Hosts: *Peromyscus maniculatus* (3, 4, 5, 6)

*P. m. artemisiae* (5)

*Peromyscus* spp. (7)

*Spermophilus columbianus* (1, 2, 7)

Dist.: BC

Records: 1. Rothschild 1905; 2. Wagner 1936a, 3. 1940; 4. Holland 1941a; 5. Holland 1949; 6. Hopkins and Rothschild 1962; 7. Holland 1984

*Catallagia borealis* Ewing, 1929

Hosts: *Blarina brevicauda* (1, 2)

*Clethrionomys gapperi* (7, 10)

*C. g. loringi* (8, 10)

*C. g. ochraceus* (4, 10)

*C. g. proteus* (3, 5)

*Microtus chrotorrhinus* (9)

*M. pennsylvanicus* (5, 10)

*Peromyscus maniculatus* (6)

*P. m. abietorum* (4)

*P. m. bairdii* (10)

Dist.: Alta, Man, NB, Ont, Que

Records: 1. Brown 1944 (Alta); 2. Jameson 1950 (Ont); 3. Holland 1952a (Que); 4. Brown 1955 (NB); 5. Hopkins and Rothschild 1962 (Ont, Que); 6. Buckner 1964 (Man); 7. Brown 1968 (NB); 8. Buckner and Blasko 1969 (Man); 9. Whitaker and French 1982 (NB); 10. Holland 1984 (Man, NB, Ont, Que)

*Catallagia charlottensis* (Baker, 1898)

Syn.: *Ceratophyllus charlottensis* (Baker, 1904)

*Pulex charlottensis* Baker, 1898

*Typhlopsylla charlottensis* Baker, 1898

Hosts: *Clethrionomys gapperi* (5, 7)

*C. g. cascadenis* (7)

*C. g. caurinus* (7)

*C. g. saturatus* (4)

*Clethrionomys* spp. (7)

*Eutamias* spp. (7)

*Microtus longicaudus macrurus* (5)

*M. oregoni serpens* (5, 7)

*M. townsendii tetramerus* (7)

*M. t. townsendii* (5)

*Microtus* spp. (5, 7)

*Neotoma cinerea* (2, 4)

*Neurotrichus g. gibbsii* (5)

*Peromyscus leucopus* (2, 4)

*P. maniculatus* (5, 7)

*P. m. austerus* (5, 7)

*P. m. borealis* (2, 5)

*P. m. interdictus* (5)

*P. m. keeni* (1)

*P. m. macrorhinus* (3)

*P. m. oreas* (5)

*Peromyscus* spp. (2, 7)

*Rattus norvegicus* (5, 6)

*Scapanus orarius schefferi* (5)

*Scapanus* spp. (5)

*Sciurus* spp. (7)

*Spermophilus columbianus* (3)

*Synaptomys* spp. (5, 7)

*Tamiasciurus hudsonicus* (7)

Dist.: Alta, BC

Records: 1. Baker 1898 (BC); 2. Rothschild 1905 (Alta, BC); 3. Wagner 1936a (BC);

4. Brown 1944 (Alta); 5. Holland 1949 (BC); 6. Hopkins and Rothschild 1962 (BC); 7. Holland 1984 (BC)

Remarks: Rev. J.H. Keen collected the specimens from a mouse nest (Baker 1898). The host was probably *P. m. keeni* (Holland 1984).

*Catallagia dacenkoi fulleri* Holland, 1951

Hosts: *Clethrionomys gapperi* (1, 4)

*C. g. athabascae* (1, 2, 4)

*C. rutilus* (3, 4)

*C. r. dawsoni* (1, 4)

*Clethrionomys* spp. (4)

*Lemmus sibiricus trimucronatus* (4)

*Microtus longicaudus vellerosus* (4)

*M. oeconomus* (4)

*M. pennsylvanicus* (2, 4)

*M. p. drummondii* (1, 2, 4)

*Microtus* spp. (1, 2, 4)

*Peromyscus* spp. (4)

Dist.: Alta, BC, Man, NWT, YT

Records: 1. Holland 1951 (BC, Man, NWT); 2. Hopkins and Rothschild 1962 (NWT, YT); 3. Mitchell and Behin 1965 (NWT); 4. Holland 1984 (Alta, BC, Man, YT)

*Catallagia decipiens* Rothschild, 1915

Hosts: *Clethrionomys gapperi* (5)

*C. g. loringi* (1)

*C. g. saturatus* (3, 4)

*C. rutilus dawsoni* (5)

*Clethrionomys* spp. (5)

*Eutamias amoenus affinis* (4, 5)

*Eutamias* spp. (5)

*Lagurus curtatus* (5)

*Lepus* spp. (5)

*Microtus longicaudus* (4, 5)

*M. l. mordax* (4)

*M. montanus canescens* (4, 5)

*M. pennsylvanicus* (5)

*M. p. drummondii* (4)

*Microtus* spp. (5)

*Mustela erminea* (5)

*M. frenata* (4)

*Neotoma cinerea* (1, 5)

*Neotoma* spp. (5)

*Ochotona princeps* (4)

*Ochotona* spp. (5)

*Onychomys leucogaster missouriensis* (4)

*Peromyscus maniculatus* (4, 5)

*P. m. alpinus* (5)

*P. m. artemisiae* (4, 5)

*P. m. borealis* (4, 5)

*P. m. nebrascensis* (4)

*Peromyscus* spp. (1, 5)

*Phenacomys intermedius* (4, 5)

*Sorex* spp. (4, 5)

*Spermophilus columbianus* (2, 3, 4, 5)

*S. richardsonii* (4, 5)

*Tamiasciurus hudsonicus* (4, 5)

*Thomomys talpoides fuscus* (5)



- T. t. incensus* (4)  
*Zapus hudsonicus* (5)  
*Z. princeps idahoensis* (4)  
*Zapus* spp. (5)  
 Gopher (5)  
 Vole (5)  
 Dist.: Alta, BC, Man, Sask, YT  
 Records: 1. Rothschild 1915 (Alta, BC); 2. Wagner 1936 (BC); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta, BC, Sask), 5. 1984 (Alta, BC, Man, Sask, YT)
- Catallagia jellisoni* Holland, 1954  
 Hosts: *Clethrionomys gapperi* (1, 2, 3)  
*C. rutilus dawsoni* (3)  
*Microtus pennsylvanicus* (3)  
*M. p. drummondii* (2)  
*Neotoma cinerea* (2, 3)  
*Peromyscus maniculatus* (3)  
 Dist.: Alta, BC, YT  
 Records: 1. Holland 1954 (Alta); 2. Hopkins and Rothschild 1962 (Alta, BC); 3. Holland 1984 (Alta, BC, YT)  
 Remarks: The host was either *C. r. dawsoni* or *Lemmus sibiricus* (Holland 1984).
- Catallagia mathesoni* Jameson, 1950  
 Host: *Peromyscus maniculatus*  
 Dist.: BC  
 Records: 1. Holland 1952a, 2. 1984
- Catallagia sculleni chamberlini* Hubbard, 1940  
 Hosts: *Clethrionomys* spp.  
*Microtus richardsoni*  
*Microtus* spp.  
*Peromyscus* spp.  
 Dist.: BC  
 Record: Holland 1984
- Catallagia sculleni sculleni* Hubbard, 1940  
 Syn.: *Catallagia chamberlini* Hubbard, 1940  
 Hosts: *Peromyscus maniculatus* (1)  
*P. m. austerus* (2)  
*Peromyscus* spp. (2)  
*Scapanus orarius schefferi* (1, 2)  
 Dist.: BC  
 Records: 1. Holland 1949, 2. 1984
- Catallagia* spp.  
 Host: *Peromyscus maniculatus*  
 Dist.: Man  
 Record: Buckner 1964
- Conorhinopsylla stanfordi* Stewart, 1930  
 Hosts: *Glaucomyssabrinus* (2, 4)  
*G. volans* (3)  
*G. v. volans* (1, 4)  
*Sciurus carolinensis* (4)  
*Tamiasciurus* spp. (4)  
 Dist.: Ont  
 Records: 1. Holland 1949; 2. Hopkins and Rothschild 1962; 3. Tipton et al. 1979; 4. Holland 1984
- Corrodopsylla curvata curvata* (Rothschild, 1915)  
 Syn.: *Doratopsylla curvata* Rothschild, 1915  
 Hosts: *Blarina brevicauda* (5, 10, 13, 14)  
*B. b. angusta* (12)  
*B. b. manitobensis* (11)  
*B. b. talpoides* (4)  
*Blarina* spp. (14)  
*Clethrionomys gapperi* (10, 14)  
*C. rutilus* (14)  
*C. r. dawsoni* (14)  
*Clethrionomys* spp. (14)  
*Microsorex hoyi* (10, 14)  
*Microsorex* spp. (14)  
*Microtus oeconomus* (14)  
*M. pennsylvanicus* (14)  
*Microtus* spp. (14)  
*Mustela erminea* (14)  
*Peromyscus maniculatus* (10)  
*Peromyscus* spp. (14)  
*Sorex arcticus laricorum* (11, 14)  
*S. cinereus* (9, 13, 14)  
*S. c. acadicus* (6)  
*S. c. cinereus* (14)  
*S. c. haydeni* (4)  
*S. c. miscix* (8)  
*S. fumeus* (13, 14)  
*S. palustris* (9, 13, 14)  
*S. vagrans* (4)  
*S. v. obscurus* (14)  
*Sorex* spp. (1, 2, 3, 4, 7, 14)  
*Zapus hudsonicus* (3, 13, 14)  
*Zapus* spp. (1)  
 Dist.: Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT  
 Records: 1. Rothschild 1915 (Alta); 2. Wagner 1936 (BC); 3. Brown 1944 (Alta); 4. Holland 1949 (BC, Ont, Sask); 5. Hubbard 1949 (Ont); 6. Brown 1955 (NS); 7. Gabbutt 1961 (Nfld); 8. Harper 1961 (Que); 9. Scholten et al. 1962 (Ont); 10. Robert 1962 (Que); 11. Buckner 1964 (Man); 12. Brown 1968 (NB); 13. Wright 1979 (NS); 14. Holland 1984 (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
 Remarks: Holland (1949) recorded *Sorex obscurus obscurus* as the host for *C. c. curvata*. There is some doubt about the validity of *S. o. obscurus* so we recorded it as *Sorex vagrans*.
- Corrodopsylla curvata obtusata* (Wagner, 1929)  
 Syn.: *Doratopsylla curvata obtusata* Wagner, 1929  
 Hosts: *Microtus oregoni serpens* (3)  
*Neurotrichus g. gibbsii* (3)  
*Sorex palustris* (6)  
*S. vagrans vancouverensis* (4)  
*Sorex* spp. (1, 2, 3, 4, 5, 6)  
 Dist.: BC  
 Records: 1. Wagner 1929, 2. 1936a; 3. Holland 1942, 4. 1949; 5. Hopkins and Rothschild 1966; 6. Holland 1984

- Corrodopsylla hamiltoni* (Traub, 1944)  
 Syn.: *Doratopsylla hamiltoni* Traub, 1944  
 Host: *Sorex cinereus*  
 Dist.: NB  
 Record: Whitaker and French 1982
- Corypsylla jordani* Hubbard, 1940  
 Hosts: *Neurotrichus g. gibbsii* (1, 2, 3)  
*Neurotrichus* spp. (3)  
 Dist.: BC  
 Records: 1. Holland 1949; 2. Hopkins and Rothschild 1962; 3. Holland 1984
- Corypsylla kohlsi* Hubbard, 1940  
 Syn.: *Corypsylloides kohlsi* (Hubbard, 1940)  
 Hosts: *Sorex vagrans* (2)  
*S. v. obscurus* (1)  
*S. o. setosus* (2)  
*Sorex* spp. (2)  
 Dist.: BC  
 Records: 1. Holland 1949, 2. 1984
- Corypsylla ornata* Fox, 1908  
 Hosts: *Microtus oregoni serpens* (3, 5)  
*M. t. townsendii* (3)  
*Neurotrichus* spp. (4, 5)  
*Scapanus orarius schefferi* (1, 2, 3, 5)  
*S. townsendii* (3)  
*Scapanus* spp. (4, 5)  
 Mole (5)  
 Dist.: BC  
 Records: 1. Wagner 1940; 2. Holland 1941a, 3. 1949; 4. Hopkins and Rothschild 1962; 5. Holland 1984
- Ctenophthalmus pseudagyrtis pseudagyrtis* Baker, 1895  
 Hosts: *Blarina brevicauda* (6, 7, 10, 13, 14, 15, 16)  
*B. b. angustus* (13)  
*B. b. pallida* (9)  
*B. b. talpoides* (2, 5, 16)  
*Blarina* spp. (16)  
*Clethrionomys gapperi* (5, 10, 13, 14, 16)  
*C. g. gaspeanus* (13)  
*C. g. loringi* (1, 12, 16)  
*C. g. ochraceus* (9)  
*C. g. saturatus* (3)  
*Clethrionomys* spp. (16)  
*Condylura cristata* (13, 14, 15, 16)  
*C. c. cristata* (5)  
*C. c. nigra* (4)  
*Eutamias minimus* (5, 6, 16)  
*E. m. borealis* (12, 16)  
*Eutamias* spp. (5, 16)  
*Glaucomyus volans* (12, 16)  
*Microtus chrotorrhinus* (13, 15)  
*M. ochrogaster* (16)  
*M. o. minor* (12, 16)  
*M. pennsylvanicus* (6, 10, 13, 14, 16)  
*M. p. drummondii* (1, 3, 5, 12)  
*M. p. pennsylvanicus* (2, 4, 8)
- Microtus* spp. (16)  
*Mustela* spp. (16)  
*Napaeozapus insignis* (14)  
*Napaeozapus* spp. (16)  
*Parascalops breweri* (2, 5, 12, 16)  
*Parascalops* spp. (16)  
*Peromyscus leucopus* (14)  
*P. l. noveboracensis* (5)  
*P. m. maniculatus* (6, 10, 15)  
*P. m. abietorum* (9)  
*P. m. anticostiensis* (16)  
*P. m. bairdii* (11, 16)  
*P. m. borealis* (5)  
*Peromyscus* spp. (5, 16)  
*Pitymys pinetorum scalapoides* (2)  
*Rattus norvegicus* (10, 13)  
*Scalopus aquaticus* (16)  
*Sorex cinereus* (5, 16)  
*S. fumeus* (15, 16)  
*Spermophilus r. richardsonii* (5)  
*Synaptomys borealis* (15)  
*S. cooperi* (15)  
*Tamiasciurus hudsonicus* (5, 13, 16)  
*T. h. gymnicus* (4, 9, 13)  
*Tamiasciurus* spp. (16)  
*Tamias striatus* (10, 11, 14, 16)  
*T. s. griseus* (16)  
*Zapus* spp. (10)  
 Mouse (9)  
 Dist.: Alta, Man, NB, NS, Ont, PEI, Que, Sask  
 Records: 1. Rothschild 1904 (Alta); 2. Jameson 1943 (Ont); 3. Brown 1944 (Alta); 4. Baker 1946 (Que); 5. Holland 1949 (Alta, Man, Ont, Sask); 6. Hubbard 1949a (Ont); 7. Jameson 1950 (Ont); 8. Judd 1950 (Ont); 9. Brown 1955 (NB, NS, Ont); 10. Robert 1962 (Que); 11. Buckner 1964 (Man); 12. Hopkins and Rothschild 1966 (Alta, Man, Ont); 13. Brown 1968 (NB); 14. Wright 1979 (NS); 15. Whitaker and French 1982 (NB); 16. Holland 1984 (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
- Delotelis hollandi* Smit, 1952  
 Hosts: *Clethrionomys gapperi* (1, 2, 3)  
*Clethrionomys* spp. (3)  
*Microtus longicaudus* (1, 2, 3)  
*M. montanus canescens* (2, 3)  
*M. oregoni serpens* (1, 2, 3)  
*M. townsendii* (3)  
*M. t. townsendii* (1, 2)  
*Peromyscus maniculatus* (1, 2)  
*P. m. austerus* (1, 2, 3)  
*P. m. oreae* (2, 3)  
*Peromyscus* spp. (3)  
 Dist.: Alta, BC  
 Records: 1. Holland 1949 (BC); 2. Smit 1952 (BC); 3. Holland 1984 (Alta, BC)
- Delotelis telegoni* (Rothschild, 1905)  
 Syn.: *Ceratophyllus telegoni* Rothschild, 1905  
 Hosts: *Clethrionomys gapperi* (4)  
*C. g. saturatus* (1, 2)

*Microtus longicaudus* (3, 4)  
*M. pennsylvanicus drummondii* (1, 2)  
*Microtus* spp. (4)

Dist.: Alta, BC  
Records: 1. Rothschild 1905 (Alta, BC); 2.  
Brown 1944 (Alta); 3. Holland 1949 (BC), 4.  
1984 (Alta, BC)

*Doratopsylla blarinae* Fox, 1914

Hosts: *Blarina brevicauda* (2, 3, 4, 5, 7, 8, 9)  
*B. b. Manitobensis* (6)  
*B. b. talpoides* (1, 9)  
*Blarina* spp. (9)  
*Parascalops breweri* (2)  
*Peromyscus* spp. (2, 9)  
*Sorex* spp. (2)

Dist.: BC, Man, NB, NS, Ont, Que  
Records: 1. Jameson 1943 (Ont), 2. Holland  
1949 (Ont); 3. Jameson 1950 (Ont); 4. Robert  
1962 (Que); 5. Hopkins and Rothschild 1966  
(BC); 6. Buckner and Blasko 1969 (Man); 7.  
Wright 1979 (NS); 8. Whitaker and French  
1982 (NB); 9. Holland 1984 (NB, NS, Ont,  
Que)

*Epitedia faceta* (Rothschild, 1915)

Syn.: *Neopsylla faceta* Rothschild, 1915  
Hosts: *Glaucomys sabrinus*  
*G. volans*  
*G. v. volans*  
*Glaucomys* spp.

Dist.: Ont, Que  
Record: Holland 1984

*Epitedia scapani* (Wagner, 1936)

Syn.: *Neopsylla scapani* Wagner, 1936  
Hosts: *Aplodontia r. rufa* (5)  
*Microtus oregoni serpens* (5, 6, 7)  
*M. t. townsendii* (7)  
*Mustela* spp. (3)  
*Neurotrichus gibbsii* (7)  
*N. g. gibbsii* (4, 7)  
*Neurotrichus* spp. (7)  
*Peromyscus maniculatus* (7)  
*P. m. austerus* (3, 4, 7)  
*P. m. oreas* (4)  
*Peromyscus* spp. (5, 7)  
*Rattus norvegicus* (5)  
*Scapanus orarius* (1)  
*S. o. orarius* (7)  
*S. o. schefferi* (2, 3, 4, 7)  
*S. townsendii* (3)  
*Sorex t. trowbridgii* (5)  
*Sorex* spp. (3, 4, 7)  
*Zapus* spp. (7)  
Mole (7)  
Weasel (7)

Dist.: BC  
Records: 1. Wagner 1936, 2. 1940; 3. Holland  
1941, 4. 1942, 5. 1949; 6. Hopkins and  
Rothschild 1962; 7. Holland 1984

*Epitedia stewarti* Hubbard, 1940

Host: *Peromyscus* spp.

Dist.: BC  
Record: Holland 1984

*Epitedia wenmanni wenmanni* (Rothschild, 1904)

Syn.: *Ctenophthalmus wenmanni* Rothschild,  
1904

Hosts: *Blarina brevicauda* (7, 8, 20)

*Blarina* spp. (20)  
*Clethrionomys gapperi* (5, 13, 16, 20)  
*C. g. athabascae* (20)  
*C. g. loringi* (20)  
*C. g. ochraceus* (8)  
*C. g. proteus* (12, 20)  
*C. g. ungava* (11, 20)  
*C. rutilus* (20)  
*C. r. dawsoni* (10, 20)  
*Condylura cristata* (4, 18, 20)  
*Eutamias* spp. (5)  
*Glaucomys sabrinus* (16)  
*G. s. macrotis* (16)  
*Martes americana* (20)  
*Microtus chrotorrhinus* (19, 20)  
*M. longicaudus* (20)  
*M. montanus canescens* (20)  
*M. ochrogaster minor* (12, 20)  
*M. pennsylvanicus* (18)  
*M. p. drummondii* (5, 20)  
*M. p. enixus* (11)  
*M. p. pennsylvanicus* (4, 5)  
*Microtus* spp. (5, 20)  
*Mus musculus* (5)  
*Mustela erminea* (5, 12, 20)  
*M. e. cicognani* (12, 20)  
*M. e. invicta* (20)  
*M. e. richardsonii* (20)  
*M. frenata* (12, 20)  
*M. f. longicauda* (12)  
*Mustela* spp. (12, 20)  
Mustelidae gen. spp. (20)  
*Neotoma cinerea* (1, 20)  
*Neotoma* spp. (20)  
*Onychomys leucogaster* (12, 20)  
*Peromyscus leucopus* (3, 18)  
*P. maniculatus* (1, 5, 13, 14, 20)  
*P. m. abietorum* (9, 16)  
*P. m. algidus* (20)  
*P. m. artemisiae* (5, 12, 20)  
*P. m. bairdii* (15, 20)  
*P. m. borealis* (5, 12, 20)  
*P. m. gracilis* (4, 5)  
*P. m. nebrascensis* (5)  
*Peromyscus* spp. (20)  
*Phenacomys intermedius celatus* (11, 20)  
*Phenacomys* spp. (20)  
*Sorex cinereus* (20)  
*S. c. cinereus* (17)  
*S. fumeus* (19)  
*Spermophilus richardsonii* (20)  
*S. r. richardsonii* (5)  
*Sylvilagus floridanus* (20)  
*Synaptomys borealis* (19)  
*S. cooperi* (19)



*Tamiasciurus hudsonicus* (5, 20)

*T. h. gymnicus* (9, 16)

*T. h. streatoris* (5)

*Tamiasciurus* spp. (20)

*Tamias striatus lysteri* (2)

*Vulpes vulpes* (8)

*Zapus princeps minor* (5)

Dist.: Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT

Records: 1. Rothschild 1904 (BC); 2. Jameson 1943 (Ont); 3. Brown 1944 (Alta); 4. Baker 1946 (Que); 5. Holland 1949 (Alta, BC, Man, NB, NWT, Ont, Sask); 6. Hubbard 1949a (Ont); 7. Jameson 1950 (Ont); 8. Judd 1953 (Ont); 9. Brown 1955 (NB); 10. Judd 1955 (NWT); 11. Gabbutt 1961 (Nfld); 12. Hopkins and Rothschild 1962 (Alta, BC, Man, NB, Que); 13. Robert 1962 (Que); 14. Scholten et al. 1962 (Ont); 15. Buckner 1964 (Man); 16. Brown 1968 (NB); 17. Buckner and Blasko 1969 (Man); 18. Wright 1979 (NS); 19. Whitaker and French 1982 (NB); 20. Holland 1984 (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Remarks: Holland (1949) recorded *Putorius longicaudatus* and *Putorius* spp. as the hosts. We recorded it under Mustelidae gen. spp. because the validity of the host classification was uncertain.

*Hystrichopsylla dippiei* ssp. Wilson and Johnson, 1971

Hosts: *Martes a. americana* (2)

*Tamiasciurus hudsonicus* (3)

Ground squirrels (1)

Dist.: Alta, NB, Ont

Records: 1. Gibbons and Humphreys 1941 (Alta); 2. Holland 1979 (Ont), 3. 1984 (NB, Ont)

*Hystrichopsylla dippiei dippiei* Rothschild, 1902

Hosts: *Clethrionomys gapperi* (8)

*C. g. loringi* (7, 8)

*Eutamias amoenus affinis* (2)

*Lepus* spp. (3)

*M. ochrogaster minor* (6, 8)

*M. pennsylvanicus* (5, 8)

*Microtus* spp. (8)

*Mustela frenata longicauda* (1, 6)

*M. vison energumenes* (1)

*Peromyscus maniculatus* (5, 8)

*P. m. bairdii* (7, 8)

*P. m. nebrascensis* (4)

*Peromyscus* sp. (2)

*Sorex* spp. (2)

*Spermophilus franklinii* (6)

*S. richardsonii* (5, 6)

*S. r. richardsonii* (4)

*Spilogale putorius gracilis* (2)

*Thomomys talpoides* (3)

*Zapus princeps* (5)

*Z. p. minor* (4)

Dist.: Alta, BC, Man, Ont, Sask

Records: 1. Rothschild 1902 (Alta, BC); 2. Wagner 1936a (BC); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta, Sask), 5. 1957 (Alta, Sask);

6. Hopkins and Rothschild 1962 (Alta, Man, Ont); 7. Buckner 1964 (Man); 8. Holland 1984 (Alta, BC, Man)

Remarks: Wagner (1936a) reported the mouse host as *Peromyscus eusterugus*. We could not determine the validity of this species, and so recorded it as *Peromyscus* sp.

*Hystrichopsylla dippiei spinata* Holland, 1947

Syn.: *Hystrichopsylla spinata* Holland, 1949

Hosts: *Peromyscus maniculatus* (1, 3)

*Spermophilus columbianus* (1, 3)

*Spilogale putorius gracilis* (1, 2)

Dist.: BC

Records: 1. Holland 1947, 2. 1949; 3. Hopkins and Rothschild 1962

Remarks: Holland (1947, 1949) used *Spilogale gracilis olympica* instead of *S. putorius gracilis*.

*Hystrichopsylla dippiei truncata* Holland, 1957

Hosts: *Clethrionomys gapperi* (1)

*C. g. saturatus* (3)

*Microtus longicaudus* (1)

*M. montanus canescens* (1, 3)

*M. pennsylvanicus* (1)

*M. p. drummondii* (3)

*Mustela erminea* (1)

*Peromyscus maniculatus* (1)

*P. m. artemisiae* (3)

*Peromyscus* spp. (3)

*Sorex* spp. (1, 3)

*Spermophilus columbianus* (1, 2, 3)

*Tamiasciurus hudsonicus* (1)

Dist.: BC

Records: 1. Holland 1957; 2. Hopkins and Rothschild 1962; 3. Holland 1984

*Hystrichopsylla occidentalis occidentalis* Holland, 1949

Syn.: *Hystrichopsylla gigas dippiei* Rothschild, 1902

Hosts: *Clethrionomys gapperi* (2, 3)

*C. g. caurinus* (1)

*C. rutilus dawsoni* (2)

*Clethrionomys* spp. (3)

*Microtus longicaudus* (2)

*M. l. macrurus* (3)

*M. oeconomus* (2)

*M. oregoni serpens* (2, 3, 4)

*M. townsendii* (2)

*Microtus* spp. (2)

*Neurotrichus gibbsii* (2)

*Peromyscus maniculatus* (2)

*P. m. alpinus* (3)

*P. m. austerus* (4)

*Peromyscus* spp. (3, 4)

*Phenacomys intermedius* (2)

*Rattus norvegicus* (2)

*R. rattus* (2)

*Scapanus orarius schefferi* (2)

*Scapanus* spp. (4)

*Sorex vagrans obscurus* (2)

*S. trowbridgii* (2)

- Sorex* spp. (2)  
*Tamiasciurus douglasii* (2)  
*Zapus trinotatus trinotatus* (4)  
Dist.: Alta, BC  
Records: 1. Holland 1949 (BC), 2. 1957 (BC); 3. Campos and Stark 1979 (Alta, BC); 4. Holland 1984 (BC)
- Hystrichopsylla schefferi* Chapin, 1919  
Hosts: *Mustela vison energumenos*  
*Spilogale putorius gracilis*  
Dist.: BC  
Record: Holland 1949
- Hystrichopsylla tahavuaana* Jordan, 1929  
Hosts: *Blarina brevicauda* (3, 4)  
*B. b. talpoides* (1)  
*Microtus pinetorum scalapsoides* (2)  
*Microtus* spp. (5)  
*Parascalops breweri* (2)  
Dist.: NB, Ont, Que  
Records: 1. Jameson 1943 (Ont); 2. Holland 1949 (Ont); 3. Jameson 1950 (Ont); 4. Whitaker and French 1982 (NB); 5. Holland 1984 (Que)
- Megarathroglossus divisus divisus* (Baker, 1895)  
Syn.: *Megarathroglossus longispinus* (Baker, 1895)  
*Pulex longispinus* Baker, 1895  
Hosts: *Microtus longicaudus* (3)  
*Mus* spp. (1)  
*Neotoma cinerea* (5)  
*N. c. drummondii* (3, 4, 5)  
*Neotoma* spp. (5)  
*Tamiasciurus hudsonicus* (5)  
*T. h. richardsoni* (1)  
Dist.: Alta, BC  
Records: 1. Jordan and Rothschild 1915 (Alta); 2. Wagner 1936a (BC); 3. Holland 1949 (BC); 4. Hopkins and Rothschild 1962 (Alta); 5. Holland 1984 (Alta)
- Megarathroglossus divisus exsecatus* Wagner, 1936  
Hosts: *Glaucomys sabrinus* (4, 6)  
*G. s. fuliginosus* (3)  
*Mustela* spp. (5, 6)  
*Neotoma cinerea* (4, 6)  
*Peromyscus maniculatus* (3)  
*Sciurus* spp. (6)  
*Tamiasciurus hudsonicus* (3, 5)  
*T. h. columbiensis* (3)  
*T. h. streatoris* (1, 2, 3)  
*Tamiasciurus* spp. (4, 6)  
Weasel (3)  
Dist.: BC  
Records: 1. Wagner 1936; 2. Holland 1941a, 3. 1949; 4. Mendez 1956; 5. Hopkins and Rothschild 1962; 6. Holland 1984
- Megarathroglossus procus procus* Jordan and Rothschild, 1915  
Syn.: *Megarathroglossus similis* Wagner, 1936  
Hosts: *Glaucomys* spp. (6)
- Neotoma cinerea occidentalis* (2)  
*Peromyscus maniculatus* (5)  
*Peromyscus* spp. (2, 6)  
*Rattus norvegicus* (3)  
*Spilogale putorius gracilis* (1)  
*Spilogale* spp. (2)  
*Tamiasciurus douglasii* (4, 6)  
*T. d. mollipilosus* (3)  
Squirrel (6)  
Dist.: BC  
Records: 1. Jordan and Rothschild 1915; 2. Wagner 1936a; 3. Holland 1949; 4. Mendez 1956; 5. Hopkins and Rothschild 1962; 6. Holland 1984
- Megarathroglossus sicamus* Jordan and Rothschild, 1915  
Hosts: *Canis latrans* (1)  
*Lynx* spp. (3)  
*Neotoma cinerea occidentalis* (2)  
*Neotoma* spp. (4)  
Dist.: BC  
Records: 1. Jordan and Rothschild 1915; 2. Wagner 1936a; 3. Holland 1949, 4. 1984
- Megarathroglossus spenceri* Wagner, 1936  
Syn.: *Megarathroglossus pygmaeus* Wagner, 1936  
Hosts: *Neotoma cinerea* (1, 2)  
*Ochotona princeps* (1)  
Dist.: BC  
Records: 1. Wagner 1936a; 2. Tipton et al. 1979
- Meringis parkeri* Jordan, 1937  
Host: *Dipodomys ordii terrosus*  
Dist.: Sask  
Record: Holland 1984
- Meringis shannoni* (Jordan, 1929)  
Hosts: *Perognathus parvus laingi* (2)  
*P. p. lordi* (1, 2)  
*Peromyscus maniculatus artemisiae* (1)  
Dist.: BC  
Records: 1. Holland 1941a, 2. 1949
- Nearctopsylla brooksi* (Rothschild, 1904)  
Hosts: *Canis* spp. (3, 4)  
*Lynx* spp. (3)  
*Martes americana* (1, 2, 3, 4)  
*Martes a. abietinoides* (4)  
*Mustela erminea* (2, 4)  
*M. e. cicognanii* (4)  
*M. e. invicta* (1, 3, 4)  
*M. e. richardsonii* (1, 2, 3, 4)  
*M. frenata* (2, 4)  
*M. f. longicauda* (1)  
*M. f. nevadensis* (4)  
*M. f. oribasus* (2, 4)  
*Mustela vison* (2, 3, 4)  
*M. v. energumenos* (4)  
*Mustela* spp. (2, 3, 4)  
*Spermophilus richardsonii* (3)  
Marten (4)

- Weasel (4)  
 Dist.: Alta, BC, YT  
 Records: 1. Rothschild 1904 (Alta, BC); 2. Holland 1949 (Alta, BC); 3. Hopkins and Rothschild 1962 (Alta, BC); 4. Holland 1984 (Alta, BC, YT)  
 Remarks: Holland (1984) reported three species: *Putorius cicognani* (= *Mustela erminea cicognanii*), *Putorius richardsonii* (= *M. e. richardsonii*) and *Mustela erminea richardsonii*.
- Nearctopsylla genalis* (Baker, 1904)  
 Host: *Blarina brevicauda* (1)  
 Dist.: Ont  
 Record: Jameson (1950)
- Nearctopsylla genalis genalis* (Baker, 1904)  
 Syn.: *Nearctopsylla hygini laurentina* Jordan and Rothschild, 1923  
 Hosts: *Blarina brevicauda* (5, 8)  
*Blarina* spp. (8)  
*Clethrionomys gapperi* (6)  
*Condylura cristata* (7, 8)  
*Martes americana* (8)  
*Mustela erminea* (2, 8)  
*M. e. cicognanii* (3, 8)  
*M. e. richardsonii* (6)  
*M. frenata noveboracensis* (5, 8)  
*Mustela* spp. (1, 2)  
*Scalopus* spp. (8)  
*Sorex arcticus* (4)  
*S. cinereus* (8)  
*S. c. miscix* (5, 8)  
*S. fumeus* (8)  
*Tamiasciurus hudsonicus gymnicus* (6)  
 Weasel (8)  
 Dist.: NB, Nfld, Ont, Que  
 Records: 1. Jordan and Rothschild 1923 (NB); 2. Holland 1949 (NB, Ont); 3. Judd 1954a (Ont); 3. Brown 1955 (NB); 4. Hopkins and Rothschild 1962 (Nfld, Que); 5. Brown 1968 (NB); 6. Whitaker and French 1982 (NB); 7. Holland 1984 (NB, Nfld, Ont, Que)
- Nearctopsylla genalis hygini* (Rothschild, 1904)  
 Syn.: *Ctenopsyllus hygini* Rothschild, 1904  
 Hosts: *Blarina brevicauda* (5)  
*B. b. manitobensis* (5)  
*Mustela erminea* (2, 5)  
*M. e. arctica* (5)  
*M. e. bangsi* (3)  
*M. e. cicognanii* (5)  
*M. e. invicta* (1)  
*M. e. richardsonii* (5)  
*Mustela* sp. (3, 5)  
*Sorex arcticus* (5)  
*S. a. arcticus* (5)  
*Sorex* spp. (2, 5)  
 Dist.: Alta, Man, Sask  
 Records: 1. Rothschild 1904 (Alta); 2. Holland 1949 (Alta, Man, Sask); 3. Hopkins and Rothschild 1962 (Alta, Man); 4. Buckner and Blasko 1969 (Man); 5. Holland 1984 (Alta, Man, Sask)
- Remarks: Holland (1984) classified *Mustela e. richardsonii* and *M. e. arctica* as *Putorius richardsonii* and *M. arctica arctica* respectively.
- Nearctopsylla grahami* Holland, 1979  
 Host: *Martes a. americana* (1)  
 Dist.: Ont  
 Records: 1. Holland 1979, 2. 1984
- Nearctopsylla hyrtaci* (Rothschild, 1904)  
 Syn.: *Ctenopsyllus hyrtaci* Rothschild, 1904  
 Hosts: *Clethrionomys gapperi saturatus* (2)  
*Martes americana* (2)  
*M. a. caurina* (2)  
*Microtus* spp. (4)  
*Mustela erminea* (3)  
*M. e. cicognanii* (4)  
*M. frenata* (2, 4)  
*M. f. longicauda* (3)  
*M. vison* (2)  
*M. v. energumenos* (1, 4)  
*Mustela* spp. (2, 3, 4)  
*Sorex a. arcticus* (3, 4)  
*S. cinereus* (2)  
*S. vagrans* (1, 4)  
*S. v. setosus* (4)  
*S. palustris* (4)  
*Sorex* spp. (3, 4)  
 Weasel (4)  
 Dist.: Alta, BC  
 Records: 1. Rothschild 1904 (BC); 2. Holland 1949 (BC); 3. Hopkins and Rothschild 1962 (Alta, BC); 4. Holland 1984 (Alta, BC)
- Nearctopsylla jordani* Hubbard, 1940  
 Syn.: *Nearctopsylla hygini columbiana* Wagner, 1940  
 Hosts: *Neurotrichus gibbsii* (4, 5)  
*N. g. gibbsii* (3, 5)  
*Neurotrichus* spp. (5)  
*Scapanus orarius schefferi* (1, 2, 5)  
*Scapanus* spp. (5)  
 Dist.: BC  
 Records: 1. Wagner 1940; 2. Holland 1941a, 3. 1949; 4. Hopkins and Rothschild 1962; 5. Holland 1984
- Nearctopsylla traubi* Hubbard, 1940  
 Hosts: *Microtus oregoni serpens* (2, 4)  
*Neurotrichus g. gibbsii* (1, 2, 4)  
*Scapanus orarius schefferi* (2, 3, 4)  
*S. townsendii* (2)  
 Dist.: BC  
 Records: 1. Holland 1949; 2. Smit 1952; 3. Hopkins and Rothschild 1962; 4. Holland 1984
- Neopsylla inopina* Rothschild, 1915  
 Syn.: *Epitedia inopina* (Rothschild, 1915)  
 Hosts: *Clethrionomys gapperi* (1, 8)  
*C. g. saturatus* (4)  
*Mustela frenata longicauda* (1, 4, 6)  
*Mustela* spp. (6)  
*Peromyscus maniculatus nebrascensis* (6)



*Rattus norvegicus* (8)  
*Spermophilus columbianus* (6, 7)  
*S. c. columbianus* (2, 5, 8)  
*S. franklinii* (6)  
*S. richardsonii* (1, 4, 5, 7, 8)  
*S. r. richardsonii* (6, 7)  
Ground squirrels (3)  
Weasel (8)

Dist.: Alta, BC, Sask

Records: 1. Rothschild 1915 (Alta); 2. Holland 1940 (BC); 3. Gibbons and Humphreys 1941 (Alta); 4. Brown 1944 (Alta); 5. Holland 1944 (Alta, BC, Sask), 6. 1949 (Alta, BC, Sask); 7. Hilton and Mahrt 1971 (Alta); 8. Holland 1984 (Alta, BC, Sask)

*Rhadinopsylla arborea* Smit, 1957

Hosts: *Clethrionomys gapperi* (2)

*Clethrionomys* spp. (2)  
*Martes americana* (2)  
*Microtus longicaudus* (2)  
*Neotoma cinerea* (2)  
*N. c. drummondii* (2)  
*Tamiasciurus hudsonicus* (2)  
*T. h. baileyi* (1, 2)

Dist.: Alta, BC

Record: 1. Smit 1957 (Alta); 2. Holland 1984 (Alta, BC)

*Rhadinopsylla difficilis* Smit, 1957

Hosts: *Microtus montanus canescens* (3)

*Mustela erminea* (1, 2, 3)  
*Mustela* spp. (1, 2, 3)  
*Neotoma* spp. (3)  
*Ochotona princeps* (3)  
*O. p. brooksi* (3)  
*Peromyscus* spp. (3)  
*Phenacomys* spp. (3)  
*Spermophilus lateralis* (3)

Dist.: BC

Records: 1. Smit 1957; 2. Hopkins and Rothschild 1962; 3. Holland 1984

*Rhadinopsylla fraterna* (Baker, 1895)

Syn.: *Rectofrontia fraterna* (Baker, 1895)

Hosts: *Clethrionomys gapperi* (8)

*Lagurus curtatus* (8)  
*Martes americana* (3)  
*M. a. americana* (7)  
*Microtus pennsylvanicus* (8)  
*M. p. drummondii* (5, 8)  
*Mustela frenata longicauda* (3, 4, 5, 8)  
*Mustela* spp. (5, 8)  
*Neotoma cinerea drummondii* (3)  
*Ochotona princeps* (3, 4)  
*Onychomys leucogaster missouriensis* (3, 8)  
*Peromyscus maniculatus* (8)  
*P. m. nebrascensis* (3)  
*Phenacomys intermedius* (3)  
*Spermophilus c. columbianus* (1)  
*S. richardsonii* (4, 5, 6, 8)  
*S. r. richardsonii* (3)

*Tamiasciurus hudsonicus* (3)

*Thomomys* spp. (5, 8)

Ground squirrels (2)

Dist.: Alta, BC, Ont, Sask

Records: 1. Holland 1940c (BC); 2. Gibbons and Humphreys 1941 (Alta); 3. Holland 1949 (Alta, BC, Sask); 4. Smit 1957 (Alta); 5. Hopkins and Rothschild 1962 (Alta); 6. Hilton and Mahrt 1971 (Alta); 7. Holland 1979 (Ont), 8. 1984 (BC, Sask)

*Rhadinopsylla linta* Smit, 1957

Hosts: *Clethrionomys gapperi athabascaae* (2)

*C. rutilus dawsoni* (1, 2)  
*Clethrionomys* spp. (2)  
*Lemmus sibiricus* (2)  
*Microtus* spp. (2)  
*Neotoma cinerea occidentalis* (1, 2)  
*Peromyscus maniculatus* (2)  
*Spermophilus parryii* (2)  
*Spermophilus* spp. (2)  
*Tamiasciurus hudsonicus* (2)

Dist.: BC, NWT, YT

Records: 1. Smit 1957 (BC); 2. Holland 1984 (BC, NWT, YT)

*Rhadinopsylla media* Smit, 1957

Hosts: *Clethrionomys gapperi* (2)

*C. g. proteus* (1, 2)  
*Mustela erminea* (2)  
*Mustela* spp. (2)

Dist.: Alta, Que

Records: 1. Smit 1957 (Que); 2. Hopkins and Rothschild 1962 (Alta, Que)

*Rhadinopsylla rauschi* Holland, 1979

Host: *Peromyscus maniculatus nebrascensis*

Dist.: Sask

Records: 1. Holland 1979, 2. 1984

*Rhadinopsylla sectilis goodi* (Hubbard, 1941)

Syn.: *Rectofrontia sectilis* Wagner, 1936

Hosts: *Microtus oregoni serpens* (2)

*Peromyscus maniculatus* (3)  
*P. m. austerus* (1, 2, 3)  
*P. m. oreas* (2, 3)  
*Peromyscus* spp. (2, 3)  
*Rattus norvegicus* (2, 3)  
*Spilogale putorius gracilis* (2, 3)  
*Tamiasciurus douglasii mollipilosus* (2)

Dist.: BC

Records: 1. Wagner 1936a; 2. Holland 1949, 3. 1984

*Rhadinopsylla sectilis sectilis* Jordan and Rothschild, 1923

Hosts: *Mus musculus* (2)

*Mus* spp. (1)  
*Peromyscus maniculatus* (2)  
*P. m. artemisiae* (1, 2, 3)  
*Peromyscus* spp. (3)  
*Spermophilus c. columbianus* (2)  
*Tamiasciurus hudsonicus* (3)

- T. h. streator* (2)  
Dist.: BC  
Records: 1. Jordan and Rothschild 1923; 2. Holland 1949, 3. 1984
- Stenistomera alpina* (Baker, 1895)  
Hosts: *Mus* spp. (1)  
*Neotoma cinerea* (1)  
*Peromyscus maniculatus* (2)  
Dist.: Alta  
Records: 1. Holland 1952a; 2. Hopkins and Rothschild 1962
- Stenoponia americana* (Baker, 1899)  
Syn.: *Hystrichopsylla americana* Baker, 1899  
Hosts: *Blarina brevicauda* (8)  
*B. b. manitobensis* (6)  
*B. b. talpoides* (3, 8)  
*Clethrionomys gapperi* (4, 5, 8)  
*C. g. loringi* (6, 8)  
*C. g. ochraceus* (1, 3)  
*Clethrionomys* spp. (8)  
*Microsorex h. hoyi* (6, 8)  
*Microtus ochrogaster minor* (4)  
*Mus* spp. (4)  
*Napaeozapus insignis* (7)  
*N. i. insignis* (8)  
*Peromyscus maniculatus abietorum* (3)  
*P. m. gracilis* (2, 3)  
*Tamiasciurus hudsonicus* (5)  
Dist.: Alta, Man, NB, NS, Ont, Que  
Records: 1. Morris 1943 (NB, Que); 2. Holland 1949 (Man, Ont); 3. Brown 1955 (NB, Que); 4. Hopkins and Rothschild 1962 (Alta, Man, Que); 5. Brown 1968 (NB); 6. Buckner and Blasko 1969 (Man); 7. Wright 1979 (NS); 8. Holland 1984 (Man, NS, Ont, Que)
- Tamiophila grandis* (Rothschild, 1902)  
Syn.: *Typhlopsylla grandis* Rothschild, 1902  
Hosts: *Sylvilagus floridanus mearnsi* (3)  
*Tamias striatus* (1, 2, 4, 7, 8, 9)  
*T. s. griseus* (4)  
*T. s. lysteri* (3, 5, 6)  
Chipmunk (4)  
Cottontail rabbit (4)  
Dist.: Ont, Que  
Records: 1. Rothschild 1902 (Ont); 2. Wagner 1936 (Que); 3. Jameson 1943 (Ont); 4. Holland 1949 (Ont); 5. Judd 1950 (Ont), 6. 1954a (Ont); 7. Scholten et al. 1962 (Ont); 8. Brown 1968 (Ont); 9. Holland 1984 (Ont)
- Trichopsylloides oregonensis* Ewing, 1938  
Host: *Mustela vison energumens*  
Dist.: BC  
Record: Holland 1941a
- Family ISCHNOPSYLLIDAE
- Myodopsylla gentilis* Jordan and Rothschild, 1921  
Hosts: *Myotis lucifugus* (3, 5)  
*M. l. alascensis* (3, 5)  
*M. l. lucifugus* (5)
- M. yumanensis saturatus* (3)  
*Myotis* spp. (5)  
Bat (1, 2, 3, 4, 5)  
Dist.: Alta, BC, Ont, Que  
Records: 1. Jordan and Rothschild 1921 (BC); 2. Holland 1939b (BC), 3. 1949 (BC); 4. Hopkins and Rothschild 1956 (Alta); 5. Holland 1984 (Alta, BC, Ont, Que)
- Myodopsylla insignis* (Rothschild, 1903)  
Syn.: *Ceratopsylla insignis* Rothschild, 1903  
Hosts: *Eptesicus fuscus* (7)  
*E. f. fuscus* (16)  
*E. f. pallidus* (5)  
*Myotis keeni septentrionalis* (5)  
*M. lucifugus* (1, 3, 5, 6, 7, 11, 15, 16)  
*M. l. lucifugus* (2, 4, 9, 13)  
*M. l. pernox* (16)  
*Myotis* spp. (5, 12, 14, 16)  
Bat (7, 8, 10, 16)  
Brown bat (5)  
Dist.: Alta, BC, Man, NB, Nfld, NS, Ont, PEI, Que, Sask, YT  
Records: 1. Rothschild 1903 (Ont); 2. Dymond 1938 (Ont); 3. Fuller 1943 (Ont); 4. Jameson 1943 (Ont); 5. Holland 1949 (Alta, BC, Ont, Sask); 6. Judd 1953 (Ont); 7. Hopkins and Rothschild 1956 (Ont, Que); 8. Smit 1958 (Alta); 9. Harper 1961 (Nfld); 10. Robert 1962 (Que); 11. Wilson 1967 (NB); 12. Brown 1968 (NB); 13. Buckner 1971 (Man); 14. Wright 1979 (NS); 15. Jones and Thomas 1983 (PEI); 16. Holland 1984 (Alta, NS, Ont, Que, YT)
- Myodopsylla palposa* (Rothschild, 1904)  
Syn.: *Ceratopsylla palposus* Rothschild, 1904  
*Myodopsylloides palposus* (Rothschild, 1904)  
*Rhinolophopsylla palposus* (Rothschild, 1904)  
Hosts: *Eptesicus fuscus* (6, 7, 8)  
*E. f. fuscus* (2, 3, 4, 5)  
*Mus musculus* (8)  
Bat (8)  
Brown bat (1, 6)  
Dist.: BC  
Records: 1. Rothschild 1904; 2. Wagner 1936a; 3. Spencer 1939a; 4. Wagner 1940; 5. Holland 1941a, 6. 1949; 7. Hopkins and Rothschild 1956; 8. Holland 1984
- Nycteridopsylla vancouverensis* Wagner, 1936  
Host: *Lasionycteris noctivagans*  
Dist.: BC  
Records: Wagner 1936; Holland 1984
- Family LEPTOPSYLLIDAE
- Amphipsylla sibirica pollionis* (Rothschild, 1905)  
Syn.: *Ceratophyllus pollionis* Rothschild, 1905  
Hosts: *Clethrionomys gapperi* (5)  
*C. g. athabasca* (4)  
*C. g. loringi* (1)  
*C. g. saturata* (2, 3)

- C. rutilus* (5)  
*C. r. dawsoni* (5)  
*Clethrionomys* spp. (5)  
*Lemmus sibiricus* (5)  
*Microtus longicaudus* (5)  
*M. oeconomus* (5)  
*M. pennsylvanicus* (5)  
*M. p. drummondii* (1, 2, 3, 5)  
*M. xanthognathus* (5)  
*Microtus* spp. (5)  
*Peromyscus maniculatus* (5)  
*Synaptomys* spp. (5)  
Dist.: Alta, BC, Nfld, YT  
Records: 1. Rothschild 1905 (Alta); 2. Wagner 1936a (Alta); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta), 5. 1984 (Alta, BC, Nfld, YT)
- Amphipsylla washingtona* Hubbard, 1954  
Host: Pallid vole  
Dist.: Alta  
Record: Holland 1984
- Ctenophyllus armatus* (Wagner, 1901)  
Syn.: *Ctenophyllus terribilis* Rothschild, 1903  
Hosts: *Ochotona collaris* (7)  
*O. princeps* (1, 2, 3, 5, 7)  
*O. p. brooksi* (4, 5, 6, 7)  
*O. p. cuppes* (4, 5)  
*O. p. fenisex* (5)  
*O. p. princeps* (5)  
*Ochotona* spp. (7)  
Dist.: Alta, BC, YT  
Records: 1. Rothschild 1903 (Alta); 2. Wagner 1936a (Alta); 3. Holland 1940c (BC); 4. Jellison 1941 (BC); 5. Holland 1949 (Alta, BC); 6. Hopkins and Rothschild 1971 (BC); 7. Holland 1984 (Alta, BC, YT)
- Dolichopsyllus stylosus* (Baker, 1904)  
Hosts: *Aplodontia rufa* (3)  
*A. r. rufa* (1)  
*Mustela vison energumenos* (2, 3)  
Dist.: BC  
Records: 1. Holland 1949; 2. Hopkins and Rothschild 1971; 3. Holland 1984
- Leptopsylla segnis* (Schnherr, 1811)  
Syn.: *Ctenopsyllus segnis* (Schnherr, 1811)  
Host: *Mus musculus*  
Dist.: BC, Nfld  
Records: Holland 1941a (BC), 1984 (Nfld)
- Odontopsyllus dentatus* (Baker, 1904)  
Hosts: *Sylvilagus nuttallii grangeri*  
*Sylvilagus* spp.  
Dist.: Alta, Sask  
Records: Holland 1949
- Odontopsyllus multispinosus* (Baker, 1898)  
Host: *Sylvilagus* spp.  
Dist.: Alta  
Record: Brown 1944
- Peromyscopsylla catatina* (Jordan, 1928)  
Hosts: *Blarina brevicauda angusta* (7)  
*B. b. manitobensis* (8)  
*Clethrionomys gapperi* (1, 5, 7, 10, 12)  
*C. g. gaspeanus* (7)  
*C. g. loringi* (6, 12)  
*C. g. ochraceus* (3)  
*C. g. proteus* (2, 12)  
*Clethrionomys* spp. (12)  
*Microtus chrotorrhinus* (11, 12)  
*M. c. chrotorrhinus* (1, 7)  
*M. pennsylvanicus* (12)  
*M. p. drummondii* (6)  
*Napaeozapus insignis* (12)  
*N. i. frutectanus* (1)  
*N. i. insignis* (12)  
*Peromyscus maniculatus* (4, 5)  
*P. m. bairdii* (8, 12)  
*Sorex cinereus* (12)  
*S. c. cinereus* (8)  
*Synaptomys* spp. (7)  
*Tamiasciurus hudsonicus* (12)  
*T. h. hudsonicus* (1)  
Dist.: Man, NB, Nfld, NS, NWT, Ont, Que  
Records: 1. Holland 1949 (Ont); 2. Johnson and Traub 1954 (Que, Nfld); 3. Brown 1955 (NB); 4. Harper 1956 (NWT); 5. Robert 1962 (Que); 6. Buckner 1964 (Man); 7. Brown 1968 (NB); 8. Buckner and Blasko 1969 (Man); 9. Hopkins and Rothschild 1971 (Nfld); 10. Wright 1979 (NS); 11. Whitaker and French 1982 (NB); 12. Holland 1984 (Man, Nfld, NS, Ont)  
Remarks: Harper (1956) recorded the host as *Peromyscus maniculatus drummondii*. Because of the doubtful nature of this subspecies we used *P. maniculatus*.
- Peromyscopsylla hamifer hamifer* (Rothschild, 1906)  
Syn.: *Ctenopsyllus hamifer* Rothschild, 1906  
*Peromyscopsylla hamifer markworthi* Hubbard, 1949  
Hosts: *Clethrionomys gapperi* (8)  
*C. g. loringi* (6, 8)  
*C. g. proteus* (5)  
*C. rutilus* (8)  
*Microtus longicaudus* (7, 8)  
*M. pennsylvanicus* (4, 5, 7, 8)  
*M. p. drummondii* (8)  
*M. p. enixus* (7, 8)  
*M. p. labradorius* (5, 7, 8)  
*M. p. pennsylvanicus* (3)  
*M. xanthognathus* (8)  
*Microtus* spp. (8)  
*Mustela erminea* (5, 6)  
*M. e. cicognani* (5)  
*Mustela* spp. (1, 2, 5, 7, 8)  
*Mus* spp. (7)  
*Sorex cinereus* (8)  
Dist.: Alta, BC, Man, Nfld, NWT, Ont, Que, Sask  
Records: 1. Rothschild 1906 (Alta); 2. Brown



1944 (Alta); 3. Baker 1946 (Que); 4. Hubbard 1949a (Ont); 5. Johnson and Traub 1954 (Alta, Nfld, NWT, Ont, Que); 6. Buckner and Blasko 1969 (Man); 7. Hopkins and Rothschild 1971 (Alta, BC, Nfld, Ont, Que); 8. Holland 1984 (Alta, BC, Man, Nfld, NWT, Ont, Sask)

*Peromyscopsylla hesperomys adelpha* (Rothschild, 1915)

Hosts: *Clethrionomys* spp. (2)  
*Lagurus curtatus* (2)  
*Peromyscus* spp. (1, 2)

Dist.: Alta, Sask

Records: 1. Johnson and Traub 1954 (Alta); 2. Holland 1984 (Alta, Sask)

*Peromyscopsylla hesperomys hesperomys* (Baker, 1904)

Hosts: *Microtus* spp. (4)  
*Peromyscus leucopus* (3, 4)  
*P. maniculatus* (3)  
*Peromyscus* spp. (1, 2, 4)

Dist.: NS, Ont, Que

Records: 1. Holland 1952a (Ont, Que); 2. Johnson and Traub 1954 (Ont); 3. Wright 1979 (NS); 4. Holland 1984 (NS, Ont, Que)

*Peromyscopsylla hesperomys pacifica* Holland, 1949

Hosts: *Microtus oregoni serpens* (3)  
*Peromyscus maniculatus* (3)  
*P. m. austerus* (1, 2)  
*P. m. interdictus* (1)  
*P. m. oreas* (1, 2)  
*Peromyscus* spp. (3)

Dist.: BC

Records: 1. Holland 1949; 2. Hopkins and Rothschild 1971; 3. Holland 1984

*Peromyscopsylla ostsibirica longiloba* (Jordan, 1939)

Hosts: *Microtus oeconomus*  
*Microtus* spp.

Dist.: YT

Record: Holland 1984

*Peromyscopsylla ravalliensis* (Dunn, 1923)

Syn.: *Ctenopsyllus ravalliensis* Dunn, 1923  
*Ctenopsyllus rawalliensis* Dunn and Parker, 1923

Hosts: *Neotoma cinerea* (2, 3, 4)  
*N. c. occidentalis* (1, 2)  
*Neotoma* spp. (3, 4)  
*Ochotona princeps* (2)  
*Peromyscus maniculatus* (2)

Dist.: Alta, BC

Records: 1. Wagner 1936 (BC); 2. Holland 1949 (BC); 3. Hopkins and Rothschild 1971 (Alta, BC); 4. Holland 1984 (Alta, BC)

*Peromyscopsylla scotti* Fox, 1939

Host: *Peromyscus leucopus*

Dist.: Ont

Records: 1. Holland 1952a, 2. 1984

*Peromyscopsylla selenis* (Rothschild, 1906)

Syn.: *Ctenopsyllus selenis* Rothschild, 1906

Hosts: *Clethrionomys gapperi* (3, 4)

*C. g. athabascae* (3, 4)

*C. g. loringi* (1, 4)

*C. g. saturatus* (1, 3)

*C. rutilus* (4)

*C. r. dawsoni* (4)

*Clethrionomys* spp. (4)

*Martes americana* (3)

*Microtus longicaudus* (3, 4)

*M. l. macrurus* (4)

*M. l. vellerosus* (4)

*M. oeconomus operarius* (4)

*M. oregoni serpens* (3, 4)

*M. pennsylvanicus* (4)

*M. p. drummondii* (1, 4)

*M. t. townsendii* (4)

*Microtus* spp. (3, 4)

*Peromyscus maniculatus* (3, 4)

*P. m. borealis* (1, 3, 4)

*Peromyscus* spp. (4)

*Phenacomys intermedium* (3, 4)

*Rattus norvegicus* (3)

*Sorex* spp. (3, 4)

*Spermophilus r. richardsonii* (3)

*Synaptomys b. borealis* (3)

*Synaptomys* spp. (4)

*Tamiasciurus hudsonicus* (4)

*Zapus hudsonius* (2, 4)

*Z. princeps* (4)

*Zapus* spp. (1)

Dist.: Alta, BC, Man, NWT, Sask, YT

Records: 1. Rothschild 1906 (Alta, BC); 2. Brown 1944 (Alta); 3. Holland 1949 (Alta, BC, Man, NWT, Sask); 4. 1984 (Alta, BC, Man, NWT, Sask, YT)

## Family PULICIDAE

*Cediopsylla inaequalis inaequalis* (Baker, 1895)

Hosts: *Lepus* spp. (2, 4)

*Sylvilagus nuttallii* (1)

*S. n. grangeri* (3)

*Sylvilagus* spp. (3)

*Vulpes vulpes* (5)

Dist.: Alta, Sask

Records: 1. Holland 1941a (Alta); 2. Brown 1944 (Alta); 3. Holland 1949 (Alta, Sask); 4. Hopkins and Rothschild 1953 (Alta); 5. Holland 1984 (Sask)

*Cediopsylla simplex* (Baker, 1895)

Hosts: *Lepus capensis hybridus* (2)

*Sylvilagus floridanus* (3)

*S. f. mearnsii* (1)

*Vulpes vulpes* (3)

Cottontail rabbit (3)

Dist.: Ont

Records: 1. Holland 1949; 2. Judd 1953; 3. Holland 1984

*Ctenocephalides canis* (Curtis, 1826)

Hosts: *Rattus norvegicus* (1)

- Spilogale putorius phenax* (2)  
*Vulpes vulpes* (2)  
 Dist.: BC, Ont  
 Records: 1. Holland 1941 (BC), 2. 1984 (BC, Ont)
- Ctenocephalides felis* (Bouch, 1835)  
 Host: *Rattus norvegicus*  
 Dist.: BC  
 Record: Holland 1940c
- Ctenocephalides felis felis* (Bouch, 1835)  
 Hosts: *Rattus norvegicus* (1, 2)  
*Spilogale* spp. (2)  
 Dist.: BC  
 Records: 1. Holland 1941b, 2. 1984
- Euhoplosyllus glacialis affinis* (Baker, 1904)  
 Syn.: *Hoplosyllus affinis* (Baker, 1904)  
 Hosts: *Lepus* spp.  
*Silvilagus floridanus*  
 Dist.: Sask  
 Records: Holland 1949, 1984
- Euhoplosyllus glacialis glacialis* (Taschenberg, 1880)  
 Syn.: *Hoplosyllus glacialis* (Taschenberg, 1880)  
 Hosts: *Lepus arcticus* (1, 2, 4)  
*L. a. arcticus* (3, 4)  
 Dist.: NWT  
 Records: 1. Jordan 1932; 2. Holland 1949; 3. Hopkins and Rothschild 1953; 4. Holland 1984
- Euhoplosyllus glacialis lynx* (Baker, 1904)  
 Syn.: *Hoplosyllus glacialis lynx* (Baker, 1904)  
 Hosts: *Lepus americanus* (2, 4, 5, 8)  
*L. a. bairdii* (4)  
*L. a. columbianus* (4)  
*L. a. dalli* (1, 8)  
*L. a. struthopus* (6, 7)  
*Lepus* spp. (8)  
*Lynx canadensis* (4, 5, 8)  
*L. rufus* (8)  
*L. r. baileyi* (8)  
*L. r. fasciatus* (2, 4, 5)  
*Lynx* spp. (3, 5, 8)  
*Mustela erminea* (8)  
*Ochotona* spp. (8)  
*Vulpes vulpes* (8)  
*V. v. rubricosa* (7)  
 Bush rabbit (4, 8)  
 Fox (8)  
 Hare (4)  
 Rabbit (8)  
 Dist.: Alta, BC, NB, NWT, YT  
 Records: 1. Jordan 1932 (BC); 2. Wagner 1936 (BC); 3. Kohls 1940 (YT); 4. Holland 1949 (Alta, BC, NB, NWT); 5. Hopkins and Rothschild 1953 (Alta, BC, NB); 6. Brown 1955 (NB), 7. 1968 (NB); 8. Holland 1984 (Alta, BC, NWT, YT)
- Pulex irritans* Linnaeus, 1758  
 Hosts: *Canis latrans* (4, 5, 6)  
*Lepus townsendii* (6)  
*L. t. campanius* (4)  
*Lepus* spp. (1, 5)  
*Lynx* spp. (1, 5)  
*Odocoileus hemionus columbianus* (3)  
*Taxidea taxus* (2, 6)  
*Vulpes vulpes* (1, 5, 6)  
 Fox (6)  
 Dist.: Alta, BC, Man, PEI, Sask  
 Records: 1. Jordan and Rothschild 1908 (Alta); 2. Brown 1944 (Alta); 3. Cowan 1946 (BC); 4. Holland 1949 (Alta, Man, PEI); 5. Hopkins and Rothschild 1953 (Alta, Man); 6. Holland 1984 (Man, Sask)
- Xenopsylla cheopis* (Rothschild, 1903)  
 Hosts: *Rattus norvegicus* (1, 2, 3, 4, 5, 6, 7, 8)  
*R. rattus alexandrinus* (3, 6)  
*R. r. rattus* (6)  
 Dist.: Alta, BC, NB, NS, Ont, Que  
 Records: 1. Spencer 1936 (BC); 2. Gibbons and Humphreys 1941 (Alta); 3. Holland 1940c (BC), 4. 1941b (BC), 5. 1944 (BC), 6. 1949 (BC); 7. McKiel et al. 1960 (NB, NS, Ont, Que); 8. Holland 1984 (Ont, Que)
- Family VERMIPSYLLIDAE
- Chaetopsylla lotoris* (Stewart, 1926)  
 Syn.: *Trichopsylla lotoris* Stewart, 1926  
 Hosts: *Procyon lotor* (1, 2)  
*Vulpes vulpes* (2)  
 Dist.: Ont  
 Records: 1. Holland 1952a, 2. 1984
- Chaetopsylla setosa* Rothschild, 1906  
 Syn.: *Arctopsylla setosa* (Rothschild, 1906)  
*Trichopsylla setosus* (Rothschild, 1906)  
 Hosts: *Canis latrans* (1)  
*Erethizon dorsatum* (5)  
*Gulo gulo luscus* (4)  
*Lynx canadensis* (4)  
*Ursus americanus* (1)  
*U. arctos* (2, 3, 4)  
 Dist.: BC  
 Records: 1. Rothschild 1906; 2. Spencer 1936; 3. Wagner 1936; 4. Holland 1949, 5. Holland 1984
- Chaetopsylla tuberculaticeps* (Bezzi, 1890)  
 Syn.: *Arctopsylla ursi* (Rothschild, 1902)  
*Pulex ursi* Rothschild, 1902  
*Trichopsylla ursi* (Rothschild, 1902)  
 Hosts: *Ursus americanus* (5)  
*U. arctos* (1, 2, 3, 4, 7)  
 Dist.: Alta, BC  
 Records: 1. Rothschild 1902 (Alta); 2. Wagner 1936a (Alta); 3. Holland 1941 (BC); 4. Brown 1944 (Alta); 5. Hubbard 1947 (Alta); 6. Hopkins and Rothschild 1956 (Alta); 7. Holland 1984 (BC)

ORDER SIPHUNCULATA

Family HAEMATOPINIDAE

*Linognathoides montanus* Osborn, 1912

Host: *Spermophilus* spp.

Dist.: Canada

Record: McLeod 1933

Remarks: McLeod (1933) stated that this species is found "Practically all over the North American continent".

Family HOPLOPLEURIDAE

*Enderleinellus marmotae* Ferris, 1919

Host: *Marmota monax*

Dist.: Ont

Record: Scholten et al. 1962

*Enderleinellus nitschi* Fahrenholz, 1916

Hosts: *Napaeozapus insignis* (2)

*Tamiasciurus hudsonicus* (1, 2)

Dist.: Ont, Que

Records: 1. Scholten et al. 1962 (Ont); 2.

Gyorkos and Hilton 1982 (Que)

*Enderleinellus suturalis* (Osborn, 1891)

Hosts: *Spermophilus columbianus*

*S. franklinii*

*S. richardsonii*

Dist.: Alta

Record: Hilton and Mahrt 1971

*Fahrenholzia pinnata* Kellogg and Ferris, 1915

Hosts: *Perognathus parvus laingi*

*P. p. lordi*

Dist.: BC

Record: Spencer 1966

*Haemodipsus ventricosus* Penny, 1842

Hosts: *Lepus capensis hybridus* (1)

Lab rabbit (2)

Dist.: BC, Ont

Record: 1. Judd 1953 (Ont); 2. Spencer 1966 (BC)

*Haemodipsus* spp.

Host: *Lepus europaeus*

Dist.: Ont

Record: Judd 1950

Remarks: Judd (1950) believed his specimens may have been *Haemodipsus ventricosus*.

*Hoplopleura acanthopus* (Burmeister, 1839)

Hosts: *Blarina brevicauda* (1)

*Clethrionomys gapperi* (3)

*C. g. saturatus* (5)

*Dicrostonyx groenlandicus* (4)

*Lemmus sibiricus trimucronatus* (5)

*Microtus longicaudus* (5)

*M. l. vellerosus* (5)

*M. montanus canescens* (5)

*M. oregoni serpens* (5)

*M. pennsylvanicus* (3, 6)

*M. p. drummondii* (5)

*M. p. pennsylvanicus* (1, 2)

*M. townsendii* (5)

*Neotoma cinerea occidentalis* (5)

*Ochotona princeps fenisex* (5)

*Rattus norvegicus* (5)

*Sorex c. cinereus* (5)

*Synaptomys borealis* (7)

*S. b. chapmani* (5)

*S. cooperi* (7)

*Thomomys talpoides fuscus* (5)

Dist.: Alta, BC, NB, NWT, Ont, Sask

Records: 1. Judd 1953 (Ont), 2. 1954a (Ont); 3.

Scholten et al. 1962 (Ont); 4. McAlpine 1965

(NWT); 5. Spencer 1966 (Alta, BC, NWT,

Ont); 6. Wilson 1967 (Sask); 7. Whitaker and

French 1982 (NB)

Remarks: Spencer (1966) recorded *Microtus montanus canescens* as *M. microtus canescens*.

*Hoplopleura arboricola* (Kellogg and Ferris, 1915)

Hosts: *Eutamias amoenus affinis*

*E. a. luteiventris*

Dist.: BC

Record: Spencer 1966

*Hoplopleura erratica* (Osborn, 1896)

Host: *Tamias striatus*

Dist.: Ont, Que

Records: Scholten et al. 1962 (Ont); Gyorkos and Hilton 1982 (Que)

*Hoplopleura hesperomydis* (Osborn, 1891)

Hosts: *Clethrionomys gapperi* (3)

*Mus musculus* (1)

*Peromyscus maniculatus* (1, 3, 4, 5)

*P. m. artemisiae* (2)

*P. m. austerus* (2)

*P. m. oreas* (2)

*P. m. prevostensis* (2)

*Peromyscus* spp. (2)

*Tamiasciurus hudsonicus* (3)

Dist.: BC, NB, NS, Ont, Que

Records: 1. Scholten et al. 1962 (Ont); 2.

Spencer 1966 (BC); 3. Gyorkos and Hilton

1982 (Que); 4. Wright 1979 (NS); 5. Whitaker

and French 1982 (NB)

*Hoplopleura oenomydis* Ferris, 1921

Host: *Rattus norvegicus*

Dist.: BC

Record: Spencer 1966

*Hoplopleura sciuricola* Ferris, 1921

Hosts: *Tamiasciurus douglasii mollipilosus* (2)

*T. hudsonicus* (1, 2, 3)

*T. h. streator* (2)

Dist.: Alta, BC

Records: 1. Thompson 1934 (Alta); 2. Spencer

1966 (BC); 3. Mahrt and Chai 1972 (Alta)

*Hoplopleura trispinosa* Kellogg and Ferris, 1915

Hosts: *Glaucomys sabrinus columbiensis* (2)

*G. s. oregonensis* (1, 2)



- Dist.: Alta, BC  
Records: 1. Spencer 1956 (Alta, BC), 2. 1966 (BC)
- Microphthirus uncinatus* (Ferris, 1916)  
Syn.: *Enderleinellus uncinatus* Ferris, 1916  
Host: *Glaucomys sabrinus oregonensis*  
Dist.: Alta, BC  
Records: Spencer 1956 (Alta, BC), 1966 (BC)
- Neohaematopinus inornatus* Kellogg and Ferris, 1915  
Syn.: *Linognathoides inornatus* Kellogg and Ferris, 1916  
Host: *Neotoma cinerea occidentalis*  
Dist.: BC  
Record: Spencer 1966
- Neohaematopinus laeviusculus* (Grube, 1851)  
Hosts: *Spermophilus columbianus* (2)  
*S. c. columbianus* (1)  
*S. richardsonii* (2)  
*S. parryi* (1)  
Dist.: Alta, BC, NWT  
Records: 1. Spencer 1966 (BC, NWT); 2. Hilton and Mahrt 1971 (Alta)
- Neohaematopinus marmotae* Ferris, 1923  
Hosts: *Cynomys l. ludovicianus* (2)  
*Marmota caligata okanagana* (2)  
*M. flaviventris avara* (1, 2)  
*M. monax petrensis* (2)  
*Mustela frenata nevadensis* (2)  
Dist.: BC, Sask  
Records: 1. Holland 1938 (BC); 2. Spencer 1966 (BC, Sask)
- Neohaematopinus sciurinus* (Mjberg, 1910)  
Syn.: *Neohaematopinus antennatus semifasciatus* Ferris, 1916  
Hosts: *Microtus pennsylvanicus* (5)  
*Sciurus carolinensis* (1)  
*S. c. pennsylvanicus* (3)  
*Tamiasciurus hudsonicus* (2, 4)  
*T. h. columbiensis* (3)  
*T. h. lanuginosus* (3)  
*T. h. streator* (3)  
Dist.: Alta, BC, Ont, Que  
Records: 1. Judd 1954a (Ont); 2. Scholton et al. 1962 (Ont); 3. Spencer 1966 (BC); 4. Mahrt and Chai 1972 (Alta); 5. Gyorkos and Hilton 1982 (Que)
- Neohaematopinus sciuropteri* (Osborne, 1891)  
Hosts: *Eutamias amoenus affinis* (3)  
*Glaucomys sabrinus* (3)  
*G. s. alpinus* (3)  
*G. s. columbiensis* (3)  
*G. s. oregonensis* (1, 3)  
*Tamias striatus* (2)  
Dist.: Alta, BC, Ont  
Records: 1. Spencer 1956 (Alta, BC); 2. Scholton et al. 1962 (Ont); 3. Spencer 1966 (Alta, BC)
- Polyplax alaskensis* Ewing, 1927  
Hosts: *Clethrionomys rutilus* (1)  
*Microtus pennsylvanicus* (2)  
Dist.: NB, NWT  
Records: 1. Mitchell and Behin 1965 (NWT); 2. Whitaker and French 1982 (NB)
- Polyplax auricularis* Kellogg and Ferris, 1915  
Host: *Peromyscus maniculatus borealis*  
Dist.: Alta  
Record: Spencer 1966
- Polyplax spinulosa* Burmeister, 1839  
Syn.: *Haematopinus spinulosus* (Burmeister, 1839)  
Hosts: *Microtus oregoni serpens* (5)  
*Rattus norvegicus* (1, 2, 3, 4, 5)  
*R. r. rattus* (5)  
*Rattus* spp. (5)  
Dist.: BC, Que  
Records: 1. Whitehead 1934 (BC); 2. Spencer 1937 (BC), 3. 1939b (BC); 4. Firlotte 1948 (Que); 5. Spencer 1966 (BC)
- Family LINOGNATHIDAE
- Solenopotes ferrisi* (Fahrenheit, 1919)  
Syn.: *Cervophthirus ferrisi*  
*Linognathus ferrisi* Fahrenheit, 1919  
Hosts: *Cervus canadensis* (4)  
*Odocoileus hemionus* (6)  
*O. h. columbianus* (2, 4)  
*O. virginianus* (3, 5, 6)  
*Odocoileus* spp. (1)  
*Tamiasciurus hudsonicus columbianus* (4)  
Dist.: Alta, BC, Ont  
Records: 1. Spencer 1938a (BC); 2. Cowan 1946 (BC); 3. Scholton et al. 1962 (Ont); 4. Spencer 1966 (Alta, BC); 5. Watson and Anderson 1975 (Ont); 6. Samuel et al. 1980 (Alta)



## HOST-PARASITE LIST





CLASS MAMMALIA

ORDER ARTIODACTYLA

Family ANTILOCAPRIDAE

*Antilocapra a. americana* (Ord) Pronghorn

CHELICERATA

ACARI

*Dermacentor andersoni* (Alta)

Family BOVIDAE

*Bison bison* (L.) Bison

UNIRAMIA

MALLOPHAGA

*Damalinea sedecimdecembrii* (NWT)

*Oreamnos americanus* (de Blainville) Mountain goat

CHELICERATA

ACARI

*Dermacentor albipictus* (Alta)

*D. andersoni* (Alta, BC)

*Otobius megnini* (Alta, BC)

UNIRAMIA

MALLOPHAGA

Unidentified Mallophaga (Alta)

*Oreamnos americanus missoulae* (Allen)

CHELICERATA

ACARI

*Dermacentor andersoni* (BC)

UNIRAMIA

MALLOPHAGA

*Damalinea oreamnidis* (Alta)

*Ovis canadensis* Shaw Mountain sheep

CHELICERATA

ACARI

*Dermacentor albipictus* (Alta)

*D. andersoni* (Alta, BC)

*Otobius megnini* (BC)

*Psoroptes ovis* (Alta)

*Ovis canadensis californiana* Douglas

CHELICERATA

ACARI

*Dermacentor albipictus* (BC)

*Otobius megnini* (BC)

UNIRAMIA

DIPTERA

*Melophagus ovinus montanus* (Alaska-Yukon boundary)

MALLOPHAGA

*Damalinea ovis* (BC)

*Ovis canadensis canadensis* Shaw

CHELICERATA

ACARI

*Dermacentor andersoni* (BC)

Family CERVIDAE

*Alces alces* (L.) Moose

CHELICERATA

ACARI

*Dermacentor albipictus* (Alta, BC, Man, NB, NS, Ont, Que, Sask)

*Dermacentor andersoni* (Alta, BC, Ont)

UNIRAMIA

DIPTERA

*Cephenemyia jellisoni* (Ont)

*C. phobifer* (Ont)

*Cephenemyia* sp. (BC, Ont)

*Alces alces americana* (Clinton)

Syn.: *Alces americanus*

CHELICERATA

ACARI

*Dermacentor albipictus* (Alta, BC)

UNIRAMIA

DIPTERA

*Cephenemyia jellisoni* (Ont)

*C. phobifera* (Ont)

*Cephenemyia* spp. (BC)

*Alces alces andersoni* Peterson

CHELICERATA

ACARI

*Dermacentor andersoni* (Alta, BC)

*Cervus elaphus* L. Wapiti

CHELICERATA

ACARI

*Dermacentor albipictus* (Alta, BC, Que, Sask)

*D. andersoni* (Alta)

*Otobius megnini* (BC)

UNIRAMIA

DIPTERA

*Cephenemyia jellisoni* (Alta)

MALLOPHAGA

Mallophaga gen. spp. (Alta)

*Cervus elaphus canadensis* Erxleben

Syn.: *Cervus canadensis* Erxleben

CHELICERATA

ACARI

*Dermacentor albipictus* (Alta, BC)

UNIRAMIA

DIPTERA

*Cephenemyia jellisoni* (Alta)

MALLOPHAGA

*Damalinea concavifrons* (Alta, BC)

*D. longicornis* (Alta)

SIPHUNCULATA

*Solenopotes ferrisi* (Alta)

*Cervus elaphus nelsoni* Bailey

Syn.: *Cervus canadensis nelsoni* Bailey

UNIRAMIA

MALLOPHAGA

*Damalinea concavifrons* (Alta)

*D. longicornis* (Alta)

*Odocoileus hemionus* (Rafinesque) Mule deer

CHELICERATA

- ACARI  
*Dermacentor albipictus* (Alta, BC, Sask)  
*D. andersoni* (BC)  
*Haemaphysalis leporis-palustris* (Ont)  
*Ixodes pacificus* (BC)  
*Otobius megnini* (BC)
- UNIRAMIA  
 DIPTERA  
*Cephenemyia apicata* (Alta, BC)  
*C. jellisoni* (Alta, BC)  
*C. trompe* (Ont)  
*Lipoptena depressa* (BC)  
*Neolipoptena ferrisi* (BC)  
 MALLOPHAGA  
*Trichodectes parallelus* (Alta)  
*Tricholipeurus lipeuroides* (Alta)  
*T. parallelus* (Alta, BC)  
 SIPHUNCULATA  
*Solenopotes ferrisi* (Alta)
- Odocoileus hemionus columbianus* (Richardson)
- CHELICERATA  
 ACARI  
*Dermacentor albipictus* (BC)  
*D. andersoni* (BC)  
*Ixodes californicus* (BC)  
*I. pacificus* (BC)
- UNIRAMIA  
 DIPTERA  
*Cephenemyia jellisoni* (BC)  
*Lipoptena depressa* (BC)  
*Neolipoptena ferrisi* (BC)  
*Phormia regina* (BC)  
 MALLOPHAGA  
*Tricholipeurus lipeuroides* (BC)  
*T. parallelus* (BC)  
*Tricholipeurus* spp. (BC)  
 SIPHONAPTERA  
*Pulex irritans* (BC)  
 SIPHUNCULATA  
*Solenopotes ferrisi* (BC)
- Odocoileus hemionus hemionus* (Rafinesque)
- CHELICERATA  
 ACARI  
*Dermacentor albipictus* (BC)  
*D. andersoni* (BC)
- UNIRAMIA  
 DIPTERA  
*Cephenemyia jellisoni* (BC)  
*Lipoptena depressa* (BC)  
*Neolipoptena ferrisi* (BC)  
 MALLOPHAGA  
*Trichodectes tibialis* (BC)  
*Tricholipeurus lipeuroides* (Alta, BC)  
*T. parallelus* (BC)
- Odocoileus virginianus* (Zimmermann)  
 White-tailed deer
- CHELICERATA  
 ACARI  
*Dermacentor albipictus* (Alta, Ont)  
*Haemaphysalis leporis-palustris* (Ont)
- Ixodes scapularis* (Ont)  
*Otobius megnini* (BC)  
*Otodectes cynotis* (Alta)  
 Trombiculidae gen. spp. (Ont)
- UNIRAMIA  
 DIPTERA  
*Cephenemyia phobifera* (Ont)  
*C. trompe* (Ont)  
*Cephenemyia* spp. (Ont)  
*Lipoptena depressa* (BC)  
*Neolipoptena ferrisi* (BC)  
 MALLOPHAGA  
*Tricholipeurus lipeuroides* (Alta, Ont)  
*T. parallelus* (Alta, NS, Ont)  
 SIPHUNCULATA  
*Solenopotes ferrisi* (Alta, Ont)
- Odocoileus virginianus borealis* Miller
- UNIRAMIA  
 MALLOPHAGA  
*Tricholipeurus lipeuroides* (Que)
- Odocoileus* spp.
- UNIRAMIA  
 DIPTERA  
*Lipoptena depressa* (BC)  
 MALLOPHAGA  
*Tricholipeurus parallelus* (Ont)  
 SIPHUNCULATA  
*Solenopotes ferrisi* (BC)
- Rangifer tarandus* (L.) Caribou
- CHELICERATA  
 ACARI  
*Chorioptes texanus* (NWT)
- UNIRAMIA  
 DIPTERA  
*Cephenemyia trompe* (Man, Nfld, NWT, Sask)  
*Oedemagena tarandi* (Man, NWT)
- Rangifer tarandus caribou* (Gmelin)  
 Syn.: *Rangifer caribou sylvestris* Richardson  
 Syn.: *Rangifer montanus* Thompson-Seton
- CHELICERATA  
 ACARI  
*Dermacentor albipictus* (NS)
- UNIRAMIA  
 DIPTERA  
*Cephenemyia phobifer* (Sask)  
*C. trompe* (Alta, BC)  
*Oedemagena tarandi* (Alta)
- Rangifer tarandus groenlandicus* (L.)
- UNIRAMIA  
 DIPTERA  
*Oedemagena tarandi* (Alta, BC, NWT, YT)
- CERVIDAE OF UNDETERMINED SPECIES
- Coast deer
- CHELICERATA  
 ACARI  
*Dermacentor albipictus* (BC)



- Ixodes pacificus* (BC)  
*I. ricinus* (BC)  
UNIRAMIA  
DIPTERA  
*Lipoptena depressa* (BC)  
*L. ferrisi* (BC)
- Deer  
CHELICERATA  
ACARI  
*Dermacentor albipictus* (Alta, BC, NS)  
*D. andersoni* (Alta, BC, Ont)  
*Ixodes cookei* (BC)  
*Otobius megnini* (BC)  
UNIRAMIA  
MALLOPHAGA  
*Tricholipeurus parallelus* (Ont)  
SIPHUNCULATA  
*Solenopotes ferrisi* (BC)
- ORDER CARNIVORA  
Family CANIDAE
- Alopex lagopus* L. Arctic fox  
UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Oropsylla alaskensis* (NWT, YT)
- Alopex lagopus lagopus* L.  
Syn.: *Alopex lagopus imvuitus* (Merriam)  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla alaskensis* (NWT, YT)  
*O. arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
- Canis latrans* Say Coyote  
CHELICERATA  
ACARI  
*Dermacentor albipictus* (BC)  
*D. andersoni* (Alta, BC)  
*Ixodes rugosus* (BC)  
*I. sculptus* (BC)  
*Sarcoptes scabiei* (Alta)  
UNIRAMIA  
DIPTERA  
*Melophagus ovinus montanus* (BC)  
SIPHONAPTERA  
*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)  
*Chaetopsylla setosa* (BC)  
*Megarthroglossus sicamus* (BC)  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Que)  
*Pulex irritans* (Alta, Man, PEI, Sask)  
*Thrassis acamantis* (BC)
- Canis latrans incolatus* Hall  
UNIRAMIA  
MALLOPHAGA  
*Trichodectes canis* (BC)  
*Tricholipeurus lipeuroides* (BC)
- Canis latrans lestes* Merriam  
UNIRAMIA  
MALLOPHAGA  
*Trichodectes canis* (BC)
- Canis lupus* L. Gray wolf  
CHELICERATA  
ACARI  
*Sarcoptes scabiei* (Alta)  
UNIRAMIA  
MALLOPHAGA  
*Trichodectes canis* (Ont)
- Canis lupus columbianus* Goldman  
UNIRAMIA  
MALLOPHAGA  
*Trichodectes canis* (BC)
- Canis* spp.  
UNIRAMIA  
SIPHONAPTERA  
*Nearctopsylla brooksi* (Alta, BC, YT)  
*Oropsylla rupestris* (Alta)
- Vulpes vulpes* (L.) Red fox  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta, BC)  
*Ixodes texanus* (Ont)  
*Otodectes cynotis* (Que)  
*Sarcoptes scabiei* (Alta)  
UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus dissimilis* (NWT)  
*Cediopsylla i. inaequalis* (Sask)  
*C. simplex* (Ont)  
*Chaetopsylla lotoris* (Ont)  
*Ctenocephalides canis* (BC, Ont)  
*Epidedia w. wemmanni* (Ont)  
*Euhoplopsyllus glacialis lynx* (Alta, BC, NWT, YT)  
*Megabothris abantis* (Alta, BC)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Orchopeas c. caedens* (Alta, BC, NWT, Sask, YT)  
*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*Oropsylla arctomys* (Alta, BC, Man, NB, Ont, Que, Sask)  
*Pulex irritans* (Alta, Man, Sask)
- Vulpes vulpes rubricosa* Bangs  
Syn.: *Vulpes fulva rubricosa* of Brown (1968).  
UNIRAMIA  
SIPHONAPTERA  
*Euhoplopsyllus glacialis lynx* (NB)
- Vulpes* spp.  
UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus dissimilis* (NWT)
- CANIDAE OF UNDETERMINED SPECIES
- Fox  
UNIRAMIA

## SIPHONAPTERA

*Euhoplopyllus glacialis lynx*  
(Alta, BC, NWT, YT)

## Family FELIDAE

*Lynx canadensis* Kerr Lynx

## UNIRAMIA

## SIPHONAPTERA

*Euhoplopyllus glacialis lynx* (Alta, BC, NB,  
NWT, YT)

*Foxella ignota albertensis* (Alta)

*Monopsyllus thambus* (Alta)

*M. vison* (Alta)

*Opisodasy vesperalis* (BC)

*Orchopeas caedens durus* (BC, Nfld, NWT)

*Oropsylla halaskensis* (NWT, YT)

*Pulex irritans* (Alta)

*Trichopsylla setosus* (BC)

*T. thamba* (Alta)

*Lynx canadensis canadensis* Kerr

## UNIRAMIA

## MALLOPHAGA

*Felicola spenceri* (BC)

*Lynx rufus* Rafinesque Bobcat

## UNIRAMIA

## SIPHONAPTERA

*Euhoplopyllus glacialis lynx* (Alta, BC,  
NWT, YT)

*Opisodasy pseudarctomys* (Alta, BC, Man,  
NS, Ont, Que)

*Orchopeas caedens durus* (Alta, BC, NB,  
Nfld, NWT, Ont, Que, Sask)

*Tarsopsylla octodecimdentata coloradensis*  
(Alta, BC, Man, NWT, Ont, Sask, YT)

*Lynx rufus baileyi* Merriam

Syn.: *Lynx baileyi* Merriam

## UNIRAMIA

## SIPHONAPTERA

*Euhoplopyllus glacialis lynx* (Alta, BC, NWT,  
YT)

*Lynx rufus fasciatus* Rafinesque

Syn.: *Lynx fasciatus* Rafinesque

## UNIRAMIA

## SIPHONAPTERA

*Euhoplopyllus glacialis lynx* (Alta, BC, NB,  
NWT)

*Lynx* spp.

## UNIRAMIA

## SIPHONAPTERA

*Euhoplopyllus glacialis lynx* (Alta, BC, NB,  
NWT, YT)

*Megarhthroglossus sicamus* (BC)

*Monopsyllus thambus* (Alta)

*Nearctopsylla brooksi* (Alta, BC)

*Orchopeas sexdentatus agilis* (Alta, BC, YT)

*Pulex irritans* (Alta, Man)

## Family MUSTELIDAE

*Gulo luscus* (L.) Wolverine

Syn.: *Gulo gulo* (L.)

*Gulo gulo luscus* of Holland (1949).

## UNIRAMIA

## SIPHONAPTERA

*Caetopsylla setosa* (BC)

*Thrassis s. spenceri* (BC)

*Martes americana* (Turton) American marten

Syn.: *Mustela americana*

## CHELICERATA

## ACARI

*Listrophorus mustelae* (BC)

## UNIRAMIA

## SIPHONAPTERA

*Ceratophyllus lunatus tundrensis* (NWT)

*C. vison* (Ont)

*Epitedia w. wenmanni* (Alta, BC, Man, NB,  
Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megabothris atrox* (Ont)

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)

*Nearctopsylla brooksi* (Alta, BC, YT)

*N. g. genalis* (NB, Nfld, Ont, Que)

*N. hyrtaci* (BC)

*Orchopeas caedens* (Alta)

*O. c. caedens* (Alta, BC, Man, Que, YT)

*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont,  
Que, Sask)

*O. sexdentatus agilis* (Alta, BC, YT)

*Oropsylla arctomys* (Alta, BC, Man, NB,  
NWT, Ont, Que, Sask)

*Peromyscopsylla selenis* (Alta, BC, Man,  
NWT, Sask)

*Rhadinopsylla arborea* (Alta, BC)

*R. fraterna* (Alta, BC, Sask)

*Tarsopsylla octodecimdentata coloradensis*  
(Alta, BC, Man, NWT, Ont, Sask, YT)

*Martes americana abietinoides* Gray

## CHELICERATA

## ACARI

*Lynxacarus mustelae* (BC)

## UNIRAMIA

## SIPHONAPTERA

*Nearctopsylla brooksi* (Alta, BC, YT)

*Martes americana actuosa* (Osgood)

Syn.: *Martes actuosa*

*Mustela americana actuosa*

## UNIRAMIA

## SIPHONAPTERA

*Orchopeas c. caedens* (Alta, BC, Man, Que,  
YT)

*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont,  
Que, Sask)

*Martes americana americana* (Turton)

## UNIRAMIA

## SIPHONAPTERA

*Ceratophyllus vison* (Ont)

*Hystrihopsylla dippiei* (Ont)

*Monopsyllus vison* (Ont)

*Nearctopsylla grahami* (Ont)

*Orchopeas caedens durus* (Ont)

*Oropsylla arctomys* (Ont)

- Rhadinopsylla fraterna* (Ont)  
*Tarsopsylla octodecimentata coloradensis* (Ont)
- Martes americana caurina* (Merriam)  
 UNIRAMIA  
 SIPHONAPTERA  
*Monopsyllus ciliatus protinus* (BC)  
*Nearctopsylla hyrtaci* (BC)
- Martes pennanti* (Erxleben) Fisher  
 UNIRAMIA  
 SIPHONAPTERA  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
- Martes pennanti pennanti* (Erxleben)  
 UNIRAMIA  
 SIPHONAPTERA  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
- Mephitis mephitis* (Schreber) Striped skunk  
 CHELICERATA  
 ACARI  
*Dermacentor andersoni* (Alta, BC)  
*Hirstionyssus* spp. (Ont)  
*Ixodes cookei* (Ont)  
*I. kingi* (BC, Sask)  
*I. marmotae* (BC)  
*I. texanus* (Ont)  
*Psocus* spp. (Ont)  
 UNIRAMIA  
 MALLOPHAGA  
*Neotrichodectes mephitidis* (Ont)  
 SIPHONAPTERA  
*Megabothris asio asio* (Ont)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Thrassis acamantis* (BC)
- Mephitis mephitis mephitis* (Schreber)  
 UNIRAMIA  
 SIPHONAPTERA  
*Megabothris quirini* (Alta, BC, NWT, Ont)  
*Orchopeas caedens durus* (BC, Nfld, NWT)  
*Oropsylla arctomys* (Alta, BC, Man, NB, Ont, Que, Sask)
- Mephitis* spp.  
 UNIRAMIA  
 SIPHONAPTERA  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
- Mustela erminea* L. Ermine  
 Syn.: *Mustela arctica* (Merriam)  
 CHELICERATA  
 ACARI  
*Dermacentor andersoni* (BC)  
*Ixodes cookei* (NS)  
*I. kingi* (BC)  
 UNIRAMIA  
 MALLOPHAGA
- Stachiella kingi* (Ont)  
 SIPHONAPTERA  
*Amalaraeus athabascae* (BC, Man, Nfld, NWT, Que, Sask)  
*A. dissimilis* (Alta, BC, NWT, YT)  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)  
*C. vison* (Ont)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Dactylopsylla rara* (Alta, Sask)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Euhoplopsyllus glacialis lynx* (Alta, BC, NWT, YT)  
*Foxella ignota albertensis* (Alta, Sask)  
*F. i. recula* (Man)  
*Megabothris abantis* (Alta, BC)  
*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. a. megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. atrox* (Ont)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. groenlandicus* (Can, Nfld, Que, YT)  
*M. quirini* (Alta, BC, Man, Nfld, NWT, Ont, Que)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla brooksi* (Alta, BC, YT)  
*N. g. genalis* (NB, Nfld, Ont, Que)  
*N. g. hygini* (Alta, Man, Sask)  
*N. hyrtaci* (Alta, BC)  
*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)  
*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*Oropsylla alaskensis* (NWT)  
*Paramyscopsylla h. hamifer* (Alta, Man, NWT, Nfld, Ont, Que)  
*Rhadinopsylla difficilis* (BC)  
*R. media* (Alta, Que)
- Mustela erminea anguinae* Hall  
 UNIRAMIA  
 MALLOPHAGA  
*Trichodectes ermineae* (BC)  
 SIPHONAPTERA  
*Monopsyllus ciliatus protinus* (BC)
- Mustela erminea arctica* (Merriam)  
 UNIRAMIA  
 SIPHONAPTERA  
*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Ceratophyllus lunatus tundrensis* (NWT)  
*Foxella ignota albertensis* (Alta, Sask)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla genalis hygini* (Alta, Man, Sask)  
*Oropsylla alaskensis* (NWT)
- Mustela erminea bangsi* Hall  
 UNIRAMIA  
 SIPHONAPTERA  
*Nearctopsylla genalis hygini* (Alta, Man)



*Mustela erminea cicognanii* Bonaparte

Syn.: *Mustela cicognanii cicognanii*

*Putorius cicognanii* of Holland (1984).

UNIRAMIA

SIPHONAPTERA

*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)

*Eptedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megabothris abantis* (Alta, BC)

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Nearctopsylla brooksi* (Alta, BC, YT)

*N. g. genalis* (NB, Nfld, Ont, Que)

*N. g. hygini* (Alta, Man, Sask)

*N. hyrtaci* (Alta, BC)

*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)

*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)

*Peromyscopsylla h. hamifer* (Alta, Nfld, NWT, Ont, Que)

*Mustela erminea fallenda* Hall

UNIRAMIA

SIPHONAPTERA

*Megabothris abantis* (Alta, BC)

*Monopsyllus ciliatus protinus* (BC)

*Orchopeas nepos* (BC)

*Mustela erminea invicta* Hall

UNIRAMIA

SIPHONAPTERA

*Eptedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Malaraeus bitterootensis* (Alta)

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Nearctopsylla brooksi* (Alta, BC, YT)

*N. genalis hygini* (Alta)

*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)

*Mustela erminea richardsonii* Bonaparte

Syn.: *Mustela cicognanii richardsonii*

*Putorius richardsonii* of Holland (1984).

UNIRAMIA

MALLOPHAGA

*Trichodectes ermineae* (BC)

SIPHONAPTERA

*Eptedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Nearctopsylla brooksi* (Alta, BC, YT)

*N. g. genalis* (NB)

*N. g. hygini* (Alta, Man, Sask)

*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)

*O. c. durus* (NB)

*Mustela frenata* Lichtenstein      Long-tailed weasel

CHELICERATA

ACARI

*Ixodes sculptus* (Alta)

UNIRAMIA

SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Sask)

*Eptedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Foxella ignota albertensis* (Alta, Sask)

*F. i. recula* (BC)

*Megabothris abantis* (Alta, BC, YT)

*M. asio megalopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*M. eumolpi* (Alta, BC, Ont, Sask)

*M. lucifer* (Alta, BC, Sask)

*Monopsyllus vison* (BC)

*Nearctopsylla brooksi* (Alta, BC, YT)

*N. hyrtaci* (Alta, BC)

*O. sexdentatus agilis* (Alta, BC, YT)

*Oropsylla idahoensis* (Alta, BC, YT)

*Mustela frenata arizonensis* (Mearns)

Syn.: *Mustela arizonensis* (Mearns)

UNIRAMIA

SIPHONAPTERA

*Foxella ignota recula* (BC)

*Monopsyllus w. wagneri* (BC)

*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)

*O. sexdentatus agilis* (Alta, BC, YT)

*Mustela frenata longicauda* Bonaparte

Syn.: *Mustela longicauda* Bonaparte

UNIRAMIA

SIPHONAPTERA

*Eptedia w. wenmanni* (Alta, BC, Man, NB, Que)

*Hystrihopsylla d. dippiei* (Alta, Man, Ont)

*H. gigas dippiei* (Alta)

*Malaraeus euphorbi* (Alta, BC, Sask)

*Megabothris lucifer* (Alta, BC, Sask)

*M. quirini* (Alta, BC, NWT, Ont)

*Nearctopsylla brooksi* (Alta, BC)

*N. hyrtaci* (Alta, BC)

*Neopsylla inopina* (Alta, BC, Sask)

*Opisocrostitis labis* (Alta, Sask)

*Orchopeas caedens durus* (Alta, BC, Man, Que, YT)

*O. sexdentatus agilis* (Alta)

*Oropsylla idahoensis* (Alta)

*O. labis* (Alta)

*O. rupestris* (Alta, Man, Sask)

*Rhadinopsylla fraterna* (Alta, BC, Sask)

*Thrassis b. bacchi* (Alta, Man, Sask)

*Trichopsylla abantis* (Alta)

*Mustela frenata nevadensis* Hall

CHELICERATA

ACARI

*Dermacentor andersoni* (Alta, BC)

*Ixodes kingi* (BC, Sask)

UNIRAMIA

SIPHONAPTERA

*Megabothris lucifer* (Alta, BC, Man, Sask)

*Nearctopsylla brooksi* (Alta, BC, YT)

*Orchopeas caedens durus* (BC)

*O. sexdentatus agilis* (Alta, BC, YT)

- SIPHUNCULATA  
*Neohaematopinus marmotae* (BC)
- Mustela frenata novaboracensis* (Emmons)
- UNIRAMIA  
SIPHONAPTERA  
*Nearctopsylla g. genalis* (NB, Nfld, Ont, Que)  
*Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)
- Mustela frenata oribus* (Bangs)
- UNIRAMIA  
MALLOPHAGA  
*Trichodectes minutus* (BC)  
SIPHONAPTERA  
*Megabothris abantis* (Alta, BC, YT)  
*Nearctopsylla brooksi* (Alta, BC, YT)  
*Oropsylla idahoensis* (Alta, BC)
- Mustela nivalis rixosa* (Bangs) Least weasel  
Syn.: *Mustela rixosa* (Bangs)  
*Mustela rixosa rixosa* (Bangs)
- UNIRAMIA  
MALLOPHAGA  
*Stachiella kingi* (BC)  
SIPHONAPTERA  
*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)  
*Megabothris calcarifer gregsoni* (NWT, YT)
- Mustela putorius* L. Ferret  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta, BC)
- Mustela vison* Schreber Mink  
CHELICERATA  
ACARI  
*Ixodes cookei* (NS, Ont, Que)  
*I. pacificus* (BC)  
*I. texanus* (Ont)
- UNIRAMIA  
SIPHONAPTERA  
*Megabothris atrox* (Alta, Man, Ont)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla brooksi* (Alta, BC, YT)  
*N. hyrtaci* (BC)  
*Orchopeas caedens durus* (Ont)  
*Trichopsyllodes oregonensis* (BC)
- Mustela vison energumenos* (Bangs)
- UNIRAMIA  
MALLOPHAGA  
*Trichodectes ermineae* (BC)  
SIPHONAPTERA  
*Dolichopsyllus stylosus* (BC)  
*Hystrihopsylla d. dippei* (BC)  
*H. schefferi* (BC)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla brooksi* (Alta, BC, YT)  
*N. hyrtaci* (Alta, BC)
- Orchopeas nepos* (BC)  
*O. sexdentatus agilis* (Alta, BC, YT)  
*Thrassis acamantis* (BC)  
*Trichopsyllodes oregonensis* (BC)
- Mustela vison vison* Schreber  
CHELICERATA  
ACARI  
*Ixodes cookei* (NS)
- Mustela* spp.
- UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)  
*Ctenophthalmus p. pseudagyrtus* (NB)  
*Ctenopsyllus hamifer* (Alta)  
*Epidedia scapani* (BC)  
*E. w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Foxella ignota albertensis* (Alta)  
*F. i. recula* (BC)  
*Malaraeus telchinus* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. a. asio* (Alta, NB, Nfld, NS, Ont, PEI, Que)  
*M. a. megalopus* (Alta, Man)  
*M. atrox* (Alta, Man, Ont)  
*M. groenlandicus* (NWT, YT)  
*Megarhthroglossus divisus exsecatus* (BC)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla brooksi* (Alta, BC, YT)  
*N. g. genalis* (NB, Ont)  
*N. g. hygini* (Alta, Man, Sask)  
*N. hyrtaci* (Alta, BC)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*Oropsylla idahoensis* (Alta, BC, YT)  
*O. rupestris* (Alta, Sask)  
*Peromyscopsylla h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)  
*Rhadinopsylla difficilis* (BC)  
*R. fraterna* (Alta, BC, Sask)  
*R. media* (Alta, Que)  
*Trichopsylla a. asio* (Alta)  
*T. atrox* (Alta)
- Spilogale putorius* Merriam Spotted skunk  
UNIRAMIA  
SIPHONAPTERA  
*Orchopeas nepos* (BC)  
*O. sexdentatus agilis* (BC)
- Spilogale putorius gracilis* Merriam  
Syn.: *Spilogale gracilis latifrons* Merriam  
*Spilogale gracilis olympica* of Holland (1949).
- UNIRAMIA  
MALLOPHAGA  
*Trichodectes osborni* (BC)  
SIPHONAPTERA  
*Atyphloceras m. multidentatus* (BC)

*Hystrichopsylla d. dippei* (BC)  
*H. schefferi* (BC)  
*Megarhthroglossus p. procius* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*Rhadinopsylla setilis goodi* (BC)

*Spilogale putorius latifrons* Merriam  
UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus ciliatus protinus* (BC)

*Spilogale putorius phenax* Merriam  
Syn.: *Spilogale phenax* Merriam  
UNIRAMIA  
SIPHONAPTERA  
*Ctenocephalides canis* (BC, Ont)  
*Monopsyllus ciliatus protinus* (BC)

*Spilogale* spp.  
UNIRAMIA  
SIPHONAPTERA  
*Ctenocephalides felis felis* (BC)  
*Megarhthroglossus p. procius* (BC)

*Taxidea taxus* (Schreber) Badger  
CHELICERATA  
ACARI  
*Ixodes kingi* (Alta)  
UNIRAMIA  
SIPHONAPTERA  
*Opiscrostis bruneri* (Alta, Man, Sask,  
unspecified)  
*Oropsylla rupestris* (Alta)  
*Pulex irritans* (Alta, Man, Sask)

*Taxidea taxus taxus* (Schreber)  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta, BC)  
UNIRAMIA  
SIPHONAPTERA  
*Opisocrostis labis* (Alta, Sask)  
*Oropsylla arctomys* (Alta, BC, Man, NB,  
Ont, Que, Sask)

#### MUSTELIDAE OF UNDETERMINED SPECIES

Marten  
UNIRAMIA  
SIPHONAPTERA  
*Megabothris atrox* (Alta, Man, Ont)  
*Nearctopsylla brooksi* (Alta, BC, YT)

Mink  
CHELICERATA  
ACARI  
*Ixodes texanus* (BC)  
UNIRAMIA  
SIPHONAPTERA  
*Megabothris atrox* (Alta, Man, Ont)

Mustelidae gen. spp.  
CHELICERATA  
ACARI

*Ixodes texanus* (BC)  
UNIRAMIA  
SIPHONAPTERA  
*Epidedia w. wenmanni* (Alta, BC, Man, NB,  
Nfld, NS, NWT, Ont, Que, Sask, YT)

Pine marten  
UNIRAMIA  
SIPHONAPTERA  
*Orchopeas c. caedens* (Alta, BC, Man, Que,  
YT)

Short-tailed weasel  
UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus vison* (Alta, BC, Man, Nfld,  
NS, NWT, Ont, Que, Sask, YT)

Skunk  
UNIRAMIA  
SIPHONAPTERA  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)  
*Thrassis acamantis* (Alta, BC)

Weasel  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta)  
*Ixodes hexagonus* (BC)  
*I. marxi* (BC)  
*I. texanus* (BC)  
UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus lunatus tundrensis* (Man, Nfld,  
NWT)  
*Epidedia scapani* (BC)  
*Foxella ignota albertensis* (Alta)  
*F. i. ignota* (Man)  
*Megabothris asio megacolpus* (Alta, BC,  
Man, NWT, Ont, Que, Sask, YT)  
*Megarhthroglossus divisus execatus* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT,  
Ont, Que, Sask, YT)  
*M. w. wagneri* (Alta, BC)  
*Nearctopsylla brooksi* (Alta, BC, YT)  
*N. g. genalis* (NB, Nfld, Ont, Que)  
*N. hyrtaci* (Alta, BC)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Opisodasys k. keeni* (Alta, BC)  
*O. vesperalis* (BC)  
*Orchopeas c. caedens* (Alta, BC, Man, NWT,  
Que, Sask, YT)  
*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont,  
Que, Sask)  
*O. nepos* (BC)  
*O. sexdentatus agilis* (Alta, BC, YT)  
*Oropsylla rupestris* (Alta, Man, Sask, YT)  
*Thrassis acamantis* (Alta, BC)  
*T. b. bacchi* (Alta, Man, Sask)



Family PROCYONIDAE

*Procyon lotor* (L.) Raccoon

CHELICERATA

ACARI

*Dermacentor variabilis* (NS)

*Hirstionyssus* sp. (NS)

*Ixodes cookei* (NS)

*I. texanus* (BC, Ont)

UNIRAMIA

SIPHONAPTERA

*Chaetopsylla lotoris* (Ont)

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,

NWT, Ont, Que, Sask, YT)

*Procyon lotor vancouverensis* Nelson and Goldman

UNIRAMIA

MALLOPHAGA

*Trichodectes octomaculatus* (BC)

*Procyon* spp.

UNIRAMIA

SIPHONAPTERA

*Monopsyllus ciliatus protinus* (BC)

Family URSIDAE

*Ursus americanus* Pallas Black bear

CHELICERATA

ACARI

*Dermacentor variabilis* (NS)

UNIRAMIA

MALLOPHAGA

*Trichodectes pinguis euarctidos* (BC, Ont)

SIPHONAPTERA

*Chaetopsylla setosa* (BC)

*C. tuberculaticeps* (Alta)

*Oropsylla arctomys* (Ont)

*Ursus americanus americanus* Pallas

CHELICERATA

ACARI

*Dermacentor variabilis* (NS)

*Ursus americanus cinnamomum* Audubon and  
Bachman

UNIRAMIA

MALLOPHAGA

*Trichodectes pinguis euarctidos* (BC)

*Ursus arctos* L. Grizzly bear

Syn.: *Ursus horribilis* Ord

CHELICERATA

ACARI

*Dermacentor andersoni* (BC)

UNIRAMIA

SIPHONAPTERA

*Chaetopsylla setosa* (BC)

*C. tuberculaticeps* (Alta, BC)

*Ursus* spp.

CHELICERATA

ACARI

*Dermacentor andersoni* (Alta, BC)

URSIDAE OF UNDETERMINED SPECIES

Bears

CHELICERATA

ACARI

*Dermacentor andersoni* (Alta)

UNIRAMIA

SIPHONAPTERA

*Oropsylla arctomys* (Alta, BC, Man, NB,

Ont, Que, ask)

ORDER CHIROPTERA

Family MOLOSSIDAE

*Eumops perotis californicus* (Merriam) Greater  
mastiff bat

CHELICERATA

ACARI

*Ornithodoros* spp. (BC)

UNIRAMIA

DIPTERA

*Basilia* spp. (BC)

Family VESPERTILIONIDAE

*Eptesicus fuscus* (Palisot de Beauvois) Big brown  
bat

CHELICERATA

ACARI

*Spinturnix* spp. (Ont)

UNIRAMIA

HEMIPTERA

*Cimex pilosellus* (BC)

SIPHONAPTERA

*Myodopsylla insignis* (Ont, Que)

*M. palposa* (BC)

*Eptesicus fuscus fuscus* (Palisot de Beauvois)  
Syn.: *Vespertilio fuscus* Palisot de Beauvois

UNIRAMIA

HEMIPTERA

*Cimex pilosellus* (BC)

SIPHONAPTERA

*Myodopsylla insignis* (Alta, NS, Ont, Que,  
YT)

*M. palposa* (BC)

*Eptesicus fuscus pallidus* Young

UNIRAMIA

HEMIPTERA

*Cimex pilosellus* (BC)

SIPHONAPTERA

*Myodopsylla insignis* (Alta, BC, Ont, Sask)

*Lasionycteris noctivagans* (Le Conte) Silver-haired  
bat

UNIRAMIA

HEMIPTERA

*Cimex pilosellus* (BC, Ont)

SIPHONAPTERA

*Nycteridopsylla vancouverensis* (BC)

*Myotis keenii septentrionalis* (Trovessart) Keen's  
bat

UNIRAMIA

## SIPHONAPTERA

*Myodopsylla insignis* (Alta, BC, Ont, Sask)*Myotis lucifugus* (Le Conte) Little brown bat

## CHELICERATA

## ACARI

*Macronyssus crosbyi* (PEI)  
*Pygmephorus makunkai* (PEI)  
*Spinturnix americanus* (PEI)  
*S. globosus* (Alta)

## UNIRAMIA

## DIPTERA

*Basilia forcipata* (BC)

## HEMIPTERA

*Cimex pilosellus* (BC)

## SIPHONAPTERA

*Myodopsylla gentilis* (BC)  
*M. insignis* (Alta, BC, NB, Ont, PEI, Que, Sask, YT)*Myotis lucifugus alascensis* Miller

## UNIRAMIA

## SIPHONAPTERA

*Myodopsylla gentilis* (BC)*Myotis lucifugus lucifugus* (Le Conte)

## CHELICERATA

## ACARI

*Liponyssus occidentalis* (Ont)  
*Spinturnix* spp. (Ont)  
*Steatonyssus occidentalis* (Ont)

## UNIRAMIA

## HEMIPTERA

*Cimex pilosellus* (Ont)

## SIPHONAPTERA

*Myodopsylla gentilis* (BC)  
*M. insignis* (Man, Nfld, Ont)*Myotis lucifugus pernox* Hollister

## UNIRAMIA

## SIPHONAPTERA

*Myodopsylla insignis* (Alta, NS, Ont, Que, YT)*Myotis yumanensis saturatus* Miller Yuma bat

## UNIRAMIA

## SIPHONAPTERA

*Myodopsylla gentilis* (BC)*Myotis* spp.

## CHELICERATA

## ACARI

*Macronyssus crosbyi* (NS)  
*Spinturnix* sp. (NS)

## UNIRAMIA

## SIPHONAPTERA

*Myodopsylla gentilis* (BC)  
*M. insignis* (Alta, BC, Man, NB, NS, Ont, Que, Sask, YT)

## CHIROPTERA OF UNDETERMINED SPECIES

Bat

## CHELICERATA

## ACARI

*Liponyssus occidentalis* (BC)  
*Liponyssus* spp. (BC)  
*Ornithodoros kelleyi* (Alta, Sask)  
*Ornithodoros* spp. (unspecified)  
*Spinturnix* spp. (BC)

## UNIRAMIA

## DIPTERA

*Basilia forcipata* (BC)*Trichobius* spp. (BC)

## SIPHONAPTERA

*Myodopsylla gentilis* (BC)  
*M. insignis* (Alta, NS, Ont, Que, YT)  
*M. palposa* (BC)

Brown bat

## UNIRAMIA

## SIPHONAPTERA

*Myodopsylla insignis* (Alta, BC, Ont, Sask)  
*M. palposa* (BC)

Little brown bat

## CHELICERATA

## ACARI

*Myobia caudata* (Ont)

## UNIRAMIA

## DIPTERA

*Basilia forcipata* (unspecified)

## HEMIPTERA

*Cimex pilosellus* (BC)

Silver-haired bat

## UNIRAMIA

## HEMIPTERA

*Cimex pilosellus* (BC)

## ORDER INSECTIVORA

## FAMILY SORICIDAE

*Blarina brevicauda* (Say)

Short-tailed shrew

## CHELICERATA

## ACARI

*Amorphacarus hengererorum* (NB)  
*Androlaelaps fahrenheitzi* (NB, Ont)  
*Androlaelaps* sp. (NB)  
*Bakerania* spp. (NB)  
*Blarinobia simplex* (NB, Ont)  
*Comatacarus americanus* (Ont)  
*Cyrtolaelaps* spp. (NB)  
*Echinonyssus blarinae* (NB)  
*E. isabellinus* (NB)  
*E. talpae* (NB)  
*Euhaemogamasus liponyssoides* (Ont)  
*Eulaelaps stabularis* (NB, NS, Ont)  
*Euryparasitus* spp. (NB)  
*Euschoengastia blarinae* (Ont)  
*Haemogamasus ambulans* (NB, Ont)  
*H. liponyssoides* (NB, Ont)  
*H. longitarsus* (Ont)

*Haemagamasus* sp. (NS)  
*Haemolaelaps glasgowi* (Ont)  
*Hirstionyssus talpae* (NS)  
*Hirstionyssus* spp. (NS, Ont)  
*Ixodes angustus* (NB, NS, Ont)  
*I. muris* (NS)  
*Laelaps kochi* (Ont)  
*Listrophorus* spp. (Ont)  
*Miyatrombicula esoensis* (NB)  
*Myobia simplex* (Ont)  
 Myobiidae gen. spp. (Ont)  
*Myocoptes* spp. (Ont)  
*Myonyssus jamesoni* (Ont)  
*Neotrombicula microti* (NS)  
*Orycterixenus soricis* (NB)  
*Protomyobia americana* (NB)  
*P. claparedei* (Ont)  
*Pygmephorus horridus* (NB)  
*P. johnstoni* (NB)  
*P. lutterloughae* (NB)  
*P. moreohorridus* (NB)  
*P. nidicolus* (NB)  
*P. whitakeri* (NB)  
*Pygmephorus* spp. (NB)  
*Trombicula jamesoni* (Ont)  
*Xenoryctes latiporus* (NB)

#### UNIRAMIA

##### COLEOPTERA

*Leptinus americanus* (Ont)

##### SIPHONAPTERA

*Atyphloceras bishopi* (Ont)  
*Catallagia borealis* (Alta, Ont)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ctenophthalmus p. pseudagyrtis* (Alta, Man, NB, NS, Ont, PEI, Que, Sask)  
*Doratopsylla blarinae* (BC, NB, NS, Ont, Que)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystrichopsylla tahavauna* (NB, Ont)  
*Megabothris a. asio* (Ont)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla genalis* (Ont)  
*N. g. genalis* (NB, Nfld, Ont, Que)  
*N. g. hygini* (Alta, Man, Sask)  
*Nosopsyllus fasciatus* (BC, Man, Nfld, NS, Ont, Que)  
*Orchopeas leucopus* (Ont)  
*Stenoponia americana* (Man, NS, Ont, Que)  
 SIPHUNCULATA  
*Hoplopleura acanthopus* (Ont)

*Blarina brevicauda angusta* Anderson

#### UNIRAMIA

##### SIPHONAPTERA

*Corrodopsylla c. curvata* (NB)  
*Ctenophthalmus p. pseudagyrtis* (NB)  
*Peromyscopsylla catatina* (NB)

*Blarina brevicauda manitobensis* Anderson

#### UNIRAMIA

#### SIPHONAPTERA

*Ceratophyllus wagneri systaltus* (Man)  
*Corrodopsylla c. curvata* (Man)  
*Doratopsylla blarinae* (Man)  
*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. quirini* (Man)  
*Monopsyllus wagneri systaltus* (Man)  
*Nearctopsylla genalis hygini* (Alta, Man, Sask)  
*Peromyscopsylla catatina* (Man)  
*Stenoponia americana* (Man)

*Blarina brevicauda pallida* Smith

#### CHELICERATA

##### ACARI

*Dermacentor variabilis* (NS)  
*Ixodes angustus* (NS)

#### UNIRAMIA

##### SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtis* (NS)

*Blarina brevicauda talpoides* (Gapper)

#### UNIRAMIA

##### SIPHONAPTERA

*Atyphloceras bishopi* (Ont)  
*Corrodopsylla c. curvata* (BC, Ont, Sask)  
*Ctenophthalmus p. pseudagyrtis* (Alta, Man, NB, NS, Ont, PEI, Que, Sask)  
*Doratopsylla blarinae* (NB, NS, Ont, Que)  
*Hystrichopsyllus gigas tahavauna* (Ont)  
*H. tahavauna* (Ont)  
*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Sask, Que, YT)  
*Stenoponia americana* (Man, NS, Ont, Que)

*Blarina* spp.

#### UNIRAMIA

##### SIPHONAPTERA

*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ctenophthalmus p. pseudagyrtis* (Alta, Man, NB, NS, Ont, PEI, Que, Sask)  
*Doratopsylla blarinae* (NB, NS, Ont, Que)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*Nearctopsylla g. genalis* (NB, Nfld, Ont, Que)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

*Microsorex hoyi* (Baird) Pygmy shrew

#### CHELICERATA

##### ACARI

*Amorphacarus hengererorum* (NB)  
*Bakerdania* sp. (NB)  
*Cyrtolaelaps* sp. (NB)  
*Echinonyssus talpae* (NB)  
*Haemogamasus ambulans* (NB)  
*Ixodes angustus* (NB)  
*Miyatrombicula esoensis* (NB)  
*Orycterixenus canadensis* (NB)



*O. soricis* (NB)  
*Protomyobia americana* (NB)  
*Pygmephorus horridus* (NB)  
*P. moreohorridus* (NB)

UNIRAMIA

SIPHONAPTERA

*Corrodopsylla c. curvata* (Alta, BC, Man,  
NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Microsorex hoyi hoyi* Elliott

UNIRAMIA

SIPHONAPTERA

*Stenoponia americana* (Man, NS, Ont, Que)

*Microsorex* spp.

UNIRAMIA

SIPHONAPTERA

*Corrodopsylla c. curvata* (Alta, BC, Man,  
NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Sorex arcticus* Kerr Arctic shrew

CHELICERATA

ACARI

*Ixodes muris* (NB)

UNIRAMIA

SIPHONAPTERA

*Ceratophyllus wagneri systaltus* (Man)

*Corrodopsylla c. curvata* (Man)

*Monopsyllus wagneri systaltus* (Alta, Man,  
Ont, Sask)

*Nearctopsylla g. genalis* (NB)

*N. g. hygini* (Alta, Man, Sask)

*Sorex arcticus arcticus* Kerr

Syn.: *Sorex richardsonii* Bachman

UNIRAMIA

SIPHONAPTERA

*Nearctopsylla genalis hygini* (Alta, Man,  
Sask)

*N. hyrtaci* (Alta, BC)

*Sorex arcticus laricorum* Jackson

UNIRAMIA

SIPHONAPTERA

*Corrodopsylla c. curvata* (Alta, BC, Man,  
NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Sorex cinereus* Kerr Masked shrew

CHELICERATA

ACARI

*Amorphacarus hengererorum* (NB)

*Bakerdania* sp. (NB)

*Cyrtolaelaps* sp. (NB)

*Echinonyssus talpae* (NB)

*Eulaelaps stabularis* (NS, Sask)

*Euryparasitus* sp. (NB)

*Euschoengastia blarinae* (Ont)

Glycephagidae gen. sp. (Ont)

*Haemogamasus liponyssoides* (NB)

*Haemogamasus* sp. (NS)

*Ixodes angustus* (NB)

*I. marxi* (PEI)

*I. muris* (PEI)

*I. spinipalpis* (Alta)

*Miyatrombicula esoensis* (NB)

*Myobia* sp. (NS)

Myobiidae gen. spp. (Ont)

*Neotrombicula harperi* (NB)

*Orycteroxenus soricis* (NB)

*Protomyobia claparedei* (NB)

*Psorergates cinereus* (Man, Ont)

*Pygmephorus horridus* (NB)

*P. moreohorridus* (NB)

*P. whitakeri* (NB)

UNIRAMIA

SIPHONAPTERA

*Ceratophyllus wagneri systaltus* (Man)

*Corrodopsylla curvata* (Ont)

*C. c. curvata* (Alta, BC, Man, NB, Nfld, NS,  
NWT, Ont, Que, Sask, YT)

*C. hamiltoni* (NB)

*Ctenophthalmus p. pseudagyrtis* (Alta, Man,  
NB, NS, Ont, PEI, Que, Sask)

*Epitedia w. wenmanni* (Alta, BC, Man, NB,  
NS, NWT, Ont, Que, Sask, YT)

*Megabothris quirini* (Alta, BC, Man, NB,  
Nfld, NS, NWT, Ont, Que, Sask, YT)

*Monopsyllus wagneri systaltus* (Alta, Man,  
Ont, Sask)

*Nearctopsylla g. genalis* (NB, Nfld, Ont, Que)

*N. g. laurentina* (NB)

*N. hyrtaci* (BC)

*Orchopeas leucopus* (Alta, BC, Man, NB,  
Nfld, NS, NWT, Ont, Que, Sask)

*Peromyscopsylla catatina* (Man, Nfld, NS,  
Ont)

*P. h. hamifer* (Alta, BC, Man, Nfld, NWT,  
Ont, Sask)

SIPHUNCULATA

*Hoplopleura hesperomydis* (Ont)

*Sorex cinereus acadicus* Gilpin

CHELICERATA

ACARI

*Ixodes angustus* (NS)

*I. muris* (NS)

UNIRAMIA

SIPHONAPTERA

*Corrodopsylla c. curvata* (NS)

*Sorex cinereus cinereus* Kerr

UNIRAMIA

SIPHONAPTERA

*Corrodopsylla c. curvata* (Alta, BC, Man,  
NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Epitedia w. wenmanni* (Man)

*Megabothris quirini* (Alta, BC, Man, NB,  
Nfld, NS, NWT, Ont, Que, Sask, YT)

*Orchopeas leucopus* (Man)

*Peromyscopsylla catatina* (Man)

SIPHUNCULATA

*Hoplopleura acanthopus* (Ont)

*Sorex cinereus haydeni* Baird

UNIRAMIA

SIPHONAPTERA

*Corrodopsylla c. curvata* (BC, Ont, Sask)

- Sorex cinereus miscix* Bangs  
 UNIRAMIA  
 SIPHONAPTERA  
*Corrodopsylla c. curvata* (Que)  
*Nearctopsylla g. genalis* (NB, Nfld, Ont, Que)
- Sorex fumeus* Miller Smoky shrew  
 CHELICERATA  
 ACARI  
*Amorphacarus hengererorum* (NB)  
*Androlaelaps fahrenheitzi* (NB)  
*Bakerdania* sp. (NB)  
*Cyrtolaelaps* sp. (NB)  
*Echinonyssus talpae* (NB)  
*Epitedia wenmanni* (NB)  
*Euryparasitus* sp. (NB)  
*Euschoengastia blarinae* (Ont)  
*Glycyphagus hypudaei* (NB)  
*Haemogamasus ambulans* (NB)  
*H. liponyssoides* (NB)  
*Ixodes angustus* (NB, NS)  
*Miyatrombicula esoensis* (NB)  
*Myonyssus jamesoni* (Ont)  
*Orycteroxenus soricis* (NB)  
*Protomyobia brevisetosa* (NB)  
*Pygmephorus horridus* (NB)  
*P. moreohorridus* (NB)  
*P. whitakeri* (NB)  
*Pygmephorus* sp. (NB)  
*Xenoryctes nudus* (NB)
- UNIRAMIA  
 SIPHONAPTERA  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ctenophthalmus p. pseudagyrtis* (Alta, Man, NB, NS, Ont, PEI, Que, Sask)  
*Epitedia w. wenmanni* (NB)  
*Nearctopsylla g. genalis* (NB, Nfld, Ont, Que)
- Sorex gaspensis* Anthony and Goodwin  
 CHELICERATA  
 ACARI  
*Amorphacarus hengererorum* (NB)  
*Bakerdania* sp. (NB)  
*Cyrtolaelaps* sp. (NB)  
*Echinonyssus talpae* (NB)  
*Euryparasitus* sp. (NB)  
*Glycyphagus hypudaei* (NB)  
*Haemogamasus ambulans* (NB)  
*H. liponyssoides* (NB)  
*Ixodes angustus* (NB)  
*Miyatrombicula esoensis* (NB)  
*Orycteroxenus soricis* (NB)  
*Pygmephorus horridus* (NB)  
*P. moreohorridus* (NB)  
*P. nidicolus* (NB)  
*P. whitakeri* (NB)
- Sorex palustris* Richardson Water shrew  
 CHELICERATA  
 ACARI  
*Amorphacarus hengererorum* (NB)  
*Cyrtolaelaps* sp. (NB)
- Echinonyssus talpae* (NB)  
 Glycephagidae gen. spp. (Ont)  
*Glycyphagus hypudaei* (NB)  
*Haemogamasus ambulans* (NB)  
*Haemogamasus* spp. (NS)  
*Hirstionysus* spp. (Ont)  
*Ixodes angustus* (NB)  
 Labidophorids (Ont)  
*Miyatrombicula esoensis* (NB)  
*Myonyssus jamesoni* (NB)  
*Orycteroxenus soricis* (NB)  
*Protomyobia claparedei* (NB)  
*Pygmephorus horridus* (NB)  
*P. moreohorridus* (NB)
- UNIRAMIA  
 SIPHONAPTERA  
*Corrodopsylla curvata* (Ont)  
*C. c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*C. c. obtusata* (BC)  
*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla hyrtaci* (Alta, BC)
- Sorex trowbridgii* Baird Trowbridge's shrew  
 UNIRAMIA  
 SIPHONAPTERA  
*Hystrichopsylla o. occidentalis* (BC)
- Sorex trowbridgii trowbridgii* Baird  
 UNIRAMIA  
 SIPHONAPTERA  
*Epitedia scapani* (BC)
- Sorex vagrans* Baird Vagrant shrew  
 Syn.: *Sorex obscurus obscurus* of Holland (1949).  
*Sorex obscurus setosus* of Holland (1984).
- CHELICERATA  
 ACARI  
*Ixodes soricis* (BC)
- UNIRAMIA  
 SIPHONAPTERA  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Nearctopsylla hyrtaci* (Alta, BC)
- Sorex vagrans obscurus* Merriam  
 Syn.: *Sorex obscurus* Merriam
- UNIRAMIA  
 SIPHONAPTERA  
*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)  
*Hystrichopsylla o. occidentalis* (BC)  
*Nearctopsylla hyrtaci* (Alta, BC)
- Sorex vagrans vagrans* Baird  
 CHELICERATA  
 ACARI  
*Ixodes soricis* (BC)
- Sorex vagrans vancouverensis* Merriam  
 UNIRAMIA  
 SIPHONAPTERA  
*Corrodopsylla curvata obtusata* (BC)

*Sorex* spp.

CHELICERATA

ACARI

*Ixodes angustus* (BC)

*I. soricis* (BC)

COLEOPTERA

*Leptinus americanus* (BC)

UNIRAMIA

SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Man, Sask, YT)

*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*C. c. obtusata* (BC)

*Corypsylla kohlsi* (BC)

*Doratopsylla blarinae* (Ont)

*Epitedia scapani* (BC)

*Hystrihopsylla d. dippiei* (BC)

*H. d. truncata* (BC)

*H. o. occidentalis* (BC)

*Malaraeus telchinus* (BC)

*Megabothris abantis* (Alta, BC, YT)

*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)

*Nearctopsylla genalis hygini* (Alta, Man, Sask)

*N. hyrtaci* (Alta, BC)

*Nosopsyllus fasciatus* (BC, Ont, Que, Sask)

*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask, YT)

*Orycteroxenus canadensis* (NB)

*O. soricis* (NB)

*Pygmephorus horridus* (NB)

*P. lutterloughae* (NB)

*P. moreohorridus* (NB)

*Xenoryctes nudus* (NB)

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (Alta, Man, NB, NS, Ont, PEI, Que, Sask)

*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)

*Nearctopsylla g. genalis* (NB, Nfld, Ont, Que)

*Condylura cristata cristata* (L.)

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (Alta, Man, Ont, Sask)

*Condylura cristata nigra* Smith

CHELICERATA

ACARI

*Dermacentor variabilis* (NS)

*Ixodes angustus* (NB)

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (Que)

SORICIDAE OF UNDETERMINED SPECIES

Shrew

CHELICERATA

ACARI

*Ixodes angustus* (BC)

UNIRAMIA

SIPHONAPTERA

*Malaraeus telchinus* (BC)

Water shrew

CHELICERATA

ACARI

*Ixodes angustus* (BC)

Family TALPIDAE

*Condylura cristata* (L.) Star-nosed mole

CHELICERATA

ACARI

*Androlaelaps fahrenheitsi* (NB)

*Cyrtolaelaps* spp. (NB)

*Eadiea condylurae* (NB)

*Echinonyssus isabellinus* (NB)

*Eulaelaps stabularis* (NB)

*Euryparasitus* spp. (NB)

*Glycyphagus hypudaei* (NB)

*Haemogamasus ambulans* (NB)

*H. liponyssoides* (NB)

*Haemogamasus* spp. (NS)

*Hirstionyssus* sp. (NS)

*Ixodes angustus* (NB)

*Liponyssus* spp. (Ont)

*Neurotrichus gibbsii* (Baird) Shrew mole

UNIRAMIA

SIPHONAPTERA

*Epitedia scapani* (BC)

*Hystrihopsylla o. occidentalis* (BC)

*Nearctopsylla jordani* (BC)

*Neurotrichus gibbsii gibbsii* (Baird)

UNIRAMIA

SIPHONAPTERA

*Catallagia charlottensis* (BC)

*Corrodopsylla curvata obtusata* (BC)

*Corypsylla jordani* (BC)

*Epitedia scapani* (BC)

*Nearctopsylla jordani* (BC)

*N. traubi* (BC)

*Neurotrichus* spp.

UNIRAMIA

SIPHONAPTERA

*Corypsylla jordani* (BC)

*C. ornata* (BC)

*Epitedia scapani* (BC)

*Nearctopsylla jordani* (BC)

*Parascalops breweri* (Bachman) Hairy-tailed mole

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (Alta, Man, NB, NS, Ont, PEI, Que, Sask)

*Doratopsylla blarinae* (Ont)

*Hystrihopsylla tahavuana* (Que)



*Parascalops* spp.  
 UNIRAMIA  
 SIPHONAPTERA  
*Ctenophthalmus p. pseudagyrtes* (Alta, BC,  
 Man, NB, NS, Ont, PEI, Que, Sask)

*Scalopus* spp. Eastern mole  
 UNIRAMIA  
 SIPHONAPTERA  
*Nearctopsylla g. genalis* (NB, Nfld, Ont, Que)

*Scapanus aquaticus* (L.) Western mole  
 UNIRAMIA  
 SIPHONAPTERA  
*Ctenophthalmus p. pseudagyrtes* (Alta, Man,  
 NB, NS, Ont, PEI, Que, Sask)

*Scapanus latimanus* (Bachman) Broad-footed mole  
 CHELICERATA  
 ACARI  
*Ixodes pacificus* (BC)

*Scapanus orarius* True Coast mole  
 UNIRAMIA  
 SIPHONAPTERA  
*Eptedia scapani* (BC)

*Scapanus orarius orarius* True  
 UNIRAMIA  
 SIPHONAPTERA  
*Eptedia scapani* (BC)

*Scapanus orarius schefferi* Jackson  
 UNIRAMIA  
 SIPHONAPTERA  
*Catallagia charlottensis* (BC)  
*C. s. sculleni* (BC)  
*Corypsylla ornata* (BC)  
*Eptedia scapani* (BC)  
*Haemogamasus liponyssoides* (BC)  
*Hystrihopsylla o. occidentalis* (BC)  
*Nearctopsylla jordani* (BC)  
*N. traubi* (BC)

*Scapanus townsendii* (Bachman) Townsend's mole  
 UNIRAMIA  
 SIPHONAPTERA  
*Corypsylla ornata* (BC)  
*Eptedia scapani* (BC)  
*Nearctopsylla traubi* (BC)

*Scapanus* spp.  
 UNIRAMIA  
 SIPHONAPTERA  
*Catallagia charlottensis* (BC)  
*Corypsylla ornata* (BC)  
*Hystrihopsylla o. occidentalis* (BC)  
*Nearctopsylla jordani* (BC)

#### TALPIDAE OF UNDETERMINED SPECIES

Mole  
 CHELICERATA  
 ACARI

*Haemogamasus liponyssoides* (BC)  
 UNIRAMIA  
 SIPHONAPTERA  
*Corypsylla ornata* (BC)  
*Eptedia scapani* (BC)

#### ORDER LAGOMORPHA

##### Family LEPORIDAE

*Lepus americanus* Erxleben Snowshoe rabbit  
 CHELICERATA  
 ACARI  
*Cheyletiella parasitivorax* (Ont)  
*Dermacentor variabilis* (NS)  
*Haemaphysalis leporis-palustris* (Alta, Man,  
 NB, NS, Ont, PEI, Sask)  
*Ixodes spinipalpus* (BC)  
 UNIRAMIA  
 SIPHONAPTERA  
*Ceratophyllus vison* (Ont)  
*Megabothris abantis* (Alta, BC, YT)  
*Monopsyllus vison* (Ont)

*Lepus americanus bairdii* Hayden  
 UNIRAMIA  
 SIPHONAPTERA  
*Euhoplosyllus glacialis lynx* (Alta, BC, NB,  
 NWT)

*Lepus americanus columbiensis* Rhoads  
 UNIRAMIA  
 SIPHONAPTERA  
*Euhoplosyllus glacialis lynx* (Alta, BC, NB,  
 NWT)  
*Opisodasys vesperalis* (BC)  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)

*Lepus americanus dalli* Merriam  
 Syn.: *Lepus americanus macfarlani* Merriam  
 UNIRAMIA  
 SIPHONAPTERA  
*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Euhoplosyllus glacialis lynx* (Alta, BC,  
 NWT, YT)  
*Megabothris calcarifer gregsoni* (NWT, YT)

*Lepus americanus struthopus* Bangs  
 CHELICERATA  
 ACARI  
*Haemaphysalis leporis-palustris* (NS)  
 UNIRAMIA  
 SIPHONAPTERA  
*Euhoplosyllus glacialis lynx* (NB)

*Lepus americanus virginianus* Harlan  
 CHELICERATA  
 ACARI  
*Haemaphysalis leporis-palustris* (Alta, Man,  
 NB, NS, Ont, PEI, Sask)  
*Neotrombicula basignata* (NS)  
 UNIRAMIA  
 SIPHONAPTERA  
*Ceratophyllus vison* (Ont)

*Megabothris abantis* (Alta, BC, YT)  
*Monopsyllus ciliatus protinus* (BC)  
*M. vison* (Ont)

*Lepus arcticus* Ross Arctic hare  
UNIRAMIA

SIPHONAPTERA  
*Euhoplopyllus g. glacialis* (NWT)

*Lepus arcticus arcticus* Ross  
Syn.: *Lepus glacialis* Leach

UNIRAMIA  
SIPHONAPTERA  
*Euhoplopyllus g. glacialis* (NWT)

*Lepus capensis* L. Cape hare  
Syn.: *Lepus europaeus* Pallas

CHELICERATA  
ACARI  
*Haemaphysalis leporis-palustris* (Ont)

UNIRAMIA  
SIPHONAPTERA  
*Cediopsylla simplex* (Ont)  
SIPHUNCULATA  
*Haemodipsus* spp. (Ont)

*Lepus capensis hybridus* Desmarest  
CHELICERATA

ACARI  
*Haemaphysalis leporis-palustris* (Ont)

UNIRAMIA  
SIPHONAPTERA  
*Cediopsylla simplex* (Ont)  
SIPHUNCULATA  
*Haemodipsus ventricosus* (Ont)  
*Haemodipsus* spp. (Ont)

*Lepus townsendii* Bachman White-tailed jack  
rabbit

CHELICERATA  
ACARI  
*Haemaphysalis leporis-palustris* (Alta)

UNIRAMIA  
SIPHONAPTERA  
*Pulex irritans* (Man, Sask)

*Lepus townsendii campanius* Hollister  
Syn.: *Lepus campestris* Bachman

CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta)

UNIRAMIA  
SIPHONAPTERA  
*Oropsylla rupestris* (Alta, Man, Sask)  
*Pulex irritans* (Alta, Man, PEI)

*Lepus* spp.

UNIRAMIA  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Man, Sask,  
YT)  
*Cediopsylla i. inaequalis* (Alta)  
*Euhoplopyllus glacialis affinis* (Sask)

*E. g. lynx* (Alta, BC, NWT, YT)  
*Hoplopyllus* spp. (Alta)  
*Hystrichopsylla d. dippiei* (Alta)  
*Hystrichopsylla gigas dippiei* (Alta)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)  
*Opisocrostis t. tuberculatus* (Alta)  
*Pulex irritans* (Alta, Man)

*Sylvilagus floridanus* (Allen) Eastern cottontail  
UNIRAMIA

SIPHONAPTERA  
*Cediopsylla simplex* (Ont)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB,  
Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Euhoplopyllus glacialis affinis* (Sask)  
*Monopsyllus ciliatus protinus* (BC)

*Sylvilagus floridanus mearnsii* Allen  
UNIRAMIA

DIPTERA  
*Cuterebra* spp. (Ont)  
SIPHONAPTERA  
*Cediopsylla simplex* (Ont)  
*Tamiophila grandis* (Ont)

*Sylvilagus nuttallii* (Bachman) Nuttall's cottontail  
UNIRAMIA

SIPHONAPTERA  
*Cediopsylla i. inaequalis* (Alta)

*Sylvilagus nuttallii grangeri* (Allen)

UNIRAMIA  
SIPHONAPTERA  
*Cediopsylla i. inaequalis* (Alta, Sask)  
*Megabothris quirini* (Alta, BC, NWT, Ont)  
*Odontopsyllus dentatus* (Alta, Sask)

*Sylvilagus nuttallii nuttallii* (Bachman)

UNIRAMIA  
SIPHONAPTERA  
*Orchopeas sexdentatus agilis* (BC)

*Sylvilagus* spp.

UNIRAMIA  
SIPHONAPTERA  
*Cediopsylla i. inaequalis* (Alta, Sask)  
*Odontopsyllus dentatus* (Alta, Sask)  
*O. multispinosus* (Alta)

## LEPORIDAE OF UNDETERMINED SPECIES

Bush rabbit

UNIRAMIA  
SIPHONAPTERA  
*Euhoplopyllus glacialis lynx* (Alta, BC, NB,  
NWT, YT)  
*Opisocrostis bruneri* (unspecified)

Cottontail rabbit

UNIRAMIA  
SIPHONAPTERA  
*Cediopsylla simplex* (Ont)  
*Tamiophila grandis* (Ont)

- Hare  
 CHELICERATA  
 ACARI  
*Haemaphysalis leporis-palustris* (BC)  
 UNIRAMIA  
 SIPHONAPTERA  
*Euhoplopsylla glacialis lynx* (Alta, BC, NB, NWT)
- Jack rabbit  
 CHELICERATA  
 ACARI  
*Otobius megnini* (Alta)
- Rabbit  
 CHELICERATA  
 ACARI  
*Dermacentor andersoni* (Alta, BC, Ont)  
*Haemaphysalis cinnabarina* (BC)  
*H. leporis-palustris* (BC, NB, NS, Que, Sask)  
*Ixodes angustus* (BC)  
*I. dentatus spinipalpus* (BC)  
*I. spinipalpus* (BC)  
*Otobius megnini* (Alta)  
 UNIRAMIA  
 DIPTERA  
*Cuterebra* sp. (Ont)  
 SIPHONAPTERA  
*Euhoplopsylla glacialis lynx* (Alta, BC, NWT, YT)  
*Monopsyllus w. wagneri* (Alta, BC)
- Lab rabbit  
 CHELICERATA  
 ACARI  
*Dermacentor andersoni* (Alta, BC)  
 UNIRAMIA  
 SIPHUNCULATA  
*Haemodipsus ventricosus* (BC)
- Snowshoe hare  
 CHELICERATA  
 ACARI  
*Haemaphysalis leporis-palustris*
- Leporidae gen. spp.  
 CHELICERATA  
 ACARI  
*Dermacentor variabilis* (NS)  
 Family OCHOTONIDAE
- Ochotona collaris* (Nelson) Collared pika  
 UNIRAMIA  
 SIPHONAPTERA  
*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Ctenophyllus armatus* (Alta, BC, YT)  
*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus tolli* (YT)  
*Opisocrostis t. tuberculatus* (Alta, BC, Sask, YT)  
*Oropsylla idahoensis* (Alta, BC, YT)
- Ochotona princeps* (Richardson) Pika  
 CHELICERATA  
 ACARI  
*Ixodes angustus* (BC)  
*I. dentatus spinipalpus* (BC)  
*I. ochotonae* (BC)  
 UNIRAMIA  
 SIPHONAPTERA  
*Amphalius runatus necopinus* (Alta, BC)  
*Catallagia decipiens* (Alta, BC, Sask)  
*Ctenophyllus armatus* (Alta, BC, YT)  
*Megabothris abantis* (Alta, BC)  
*Megarhthroglossus spenceri* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)  
*Oropsylla idahoensis* (Alta, BC, YT)  
*Peromyscopsylla ravalliensis* (BC)  
*Rhadinopsylla difficilis* (BC)  
*R. fraternus* (BC)
- Ochotona princeps brooksi* Howell  
 CHELICERATA  
 ACARI  
*Ixodes ochotonae* (BC)  
 UNIRAMIA  
 SIPHONAPTERA  
*Ctenophyllus armatus* (Alta, BC, YT)  
*Monopsyllus e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)  
*Rhadinopsylla difficilis* (BC)
- Ochotona princeps brunnescens* Howell  
 CHELICERATA  
 ACARI  
*Ixodes ochotonae* (BC)
- Ochotona princeps cuppes* Bangs  
 UNIRAMIA  
 SIPHONAPTERA  
*Ctenophyllus armatus* (Alta, BC)
- Ochotona princeps fenisex* Osgood  
 UNIRAMIA  
 SIPHONAPTERA  
*Ctenophyllus armatus* (Alta, BC)  
*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)  
 SIPHUNCULATA  
*Hoplopleura acanthopus* (BC)
- Ochotona princeps princeps* (Richardson)  
 UNIRAMIA  
 SIPHONAPTERA  
*Ctenophyllus armatus* (Alta, BC)  
*Megabothris abantis* (Alta, BC)  
*Oropsylla idahoensis* (Alta, BC)
- Ochotona* spp.  
 CHELICERATA  
 ACARI  
*Ixodes angustus* (BC)  
*I. spinipalpus* (BC)



## UNIRAMIA

## SIPHONAPTERA

- Amphalius runatus necopinus* (Alta)  
*Catallagia decipiens* (Alta, BC, YT)  
*Ctenophyllus armatus* (Alta, BC, YT)  
*Euhoplopsylla glacialis lynx* (Alta, BC, NWT, YT)  
*Megabothris abantis* (Alta, BC, YT)  
*Monopsyllus ciliatus protinus* (BC)  
*M. e. umolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)

## ORDER RODENTIA

## Family APLDONTIDAE

*Aplodontia rufa* Merriam Mountain beaver

## UNIRAMIA

## SIPHONAPTERA

*Dolichopsyllus stylosus* (BC)

*Aplodontia rufa pacifica* Merriam

Syn.: *Aplodontia pacifica* Merriam

## CHELICERATA

## COLEOPTERA

*Leptinillus aplodontiae* (BC)

*Aplodontia rufa rufa* (Rafinesque)

## UNIRAMIA

## SIPHONAPTERA

*Dolichopsyllus stylosus* (BC)

*Epitedia scapani* (BC)

*Aplodontia* spp.

## CHELICERATA

## COLEOPTERA

*Leptinillus aplodontiae* (BC)

## Family CASTORIDAE

*Castor canadensis* Kuhl Beaver

## CHELICERATA

## ACARI

- Ixodes cookei* (Ont)  
*Prolabidocarpus canadensis* (Ont)  
*Psorobia castoris* (Ont)  
 COLEOPTERA  
*Leptinillus validus* (BC, Hudson Bay Area, Ont, Que)  
*Platypsillus castoris* (BC, Ont)

## CASTORIDAE OF UNDETERMINED SPECIES

Beaver

## CHELICERATA

## COLEOPTERA

- Leptinillus validus* (BC)  
*Platypsillus castoris* (BC, Ont)

## Family CAVIIDAE

Guinea pig

## CHELICERATA

## ACARI

- Dermacentor andersoni* (BC)  
*Ixodes pacificus* (BC)

## FAMILY ERETHIZONTIDAE

*Erethizon dorsatum* (L.) Porcupine

## CHELICERATA

## ACARI

- Dermacentor variabilis* (NS)  
*Ixodes cookei* (NS)

## UNIRAMIA

## MALLOPHAGA

*Eutrichophilus setosus* (NS, Ont)

## SIPHONAPTERA

- Ceratophyllus adjustus* (BC)  
*Chaetopsylla setosa* (BC)

*Erethizon dorsatum dorsatum* (L.)

## CHELICERATA

## ACARI

*Ixodes cookei* (NS)

*Erethizon dorsatum epixanthium* Brandt

## CHELICERATA

## ACARI

*Dermacentor andersoni* (Alta)

*Erethizon dorsatum nigrescens* Allen

## CHELICERATA

## ACARI

- Dermacentor andersoni* (BC)  
*Ixodes* spp. (BC)

## UNIRAMIA

## MALLOPHAGA

*Eutrichophilus setosus* (Alta, BC)

*Erethizon* sp.

## CHELICERATA

## ACARI

*Dermacentor andersoni* (BC)

## Family GEOMYIDAE

*Geomys* sp.

## UNIRAMIA

## SIPHONAPTERA

*Dactylopsylla ignota albertensis* (Alta)

*Thomomys talpoides* (Richardson)

Northern pocket gopher

Syn.: *Thomomys fuscus*

*Thomomys fuscus fuscus*

## UNIRAMIA

## MALLOPHAGA

*Geomydoecus* sp. (Sask)

- SIPHONAPTERA  
*Dactylopsylla comis* (BC)  
*D. rara* (Alta, Sask)  
*Foxella ignota albertensis* (Alta, Sask)  
*F. i. recula* (BC)  
*Hystrihopsylla d. dippiei* (Alta)  
*H. gigas dippiei* (Alta)  
*Monopsyllus w. wagneri* (Alta, BC)
- Thomomys talpoides andersoni* Goldman
- UNIRAMIA  
SIPHONAPTERA  
*Oropsylla idahoensis* (Alta, BC)
- Thomomys talpoides fuscus* Merriam
- UNIRAMIA  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Foxella ignota albertensis* (Alta)  
SIPHUNCULATA  
*Hoplopleura acanthopus* (BC)
- Thomomys talpoides incensus* Goldman
- UNIRAMIA  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Sask)  
*Foxella ignota recula* (BC)
- Thomomys* spp.
- UNIRAMIA  
SIPHONAPTERA  
*Foxella ignota albertensis* (Alta, Sask)  
*F. i. recula* (BC)  
*Megabothris abantis* (Alta, BC, YT)  
*Oropsylla idahoensis* (Alta, BC, YT)  
*O. rupestris* (Alta)  
*Rhadinopsylla fraterna* (Alta, BC, Sask)  
*Thrassis petiolatus* (BC)
- Family HETEROMYIDAE
- Dipodomys ordii* Woodhouse      Ord's kangaroo mouse
- UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus wagneri systaltus* (Alta, Man, Ont, Sask)
- Dipodomys ordii terrassus* Hoffmeister
- UNIRAMIA  
SIPHONAPTERA  
*Meringis parkeri* (Sask)
- Perognathus parvus laingi* Anderson      Great basin pocket mouse
- UNIRAMIA  
SIPHUNCULATA  
*Fahrenholzia pinnata* (BC)
- Perognathus parvus lordi* (Gray)  
Syn.: *Perognathus l. lordi* (Gray)
- UNIRAMIA  
SIPHONAPTERA
- Meringis shannoni* (BC)  
SIPHUNCULATA  
*Fahrenholzia pinnata* (BC)
- Family MURIDAE
- Clethrionomys gapperi* (Vigors)      Gapper's red-backed mouse
- Syn.: *Evotomys gapperi* (Bailey)  
*Evotomys saturatus* of Holland (1984).
- CHELICERATA  
ACARI  
*Androlaelaps fahrenholzi* (NB)  
*Androlaelaps* sp. (NS)  
*Cyrtolaelaps* sp. (NB)  
*Dermacarus hypudaei septentrionalis* (Que)  
*D. variabilis* (Man, NS)  
*Echinonyssus isabellinus* (NB)  
*Echinonyssus* sp. (NB)  
*Eulaelaps stabularis* (NB, NS)  
*Euschoengastia blarinae* (NB)  
*Euschoengastia* sp. (NS)  
Glycyphagidae gen. spp. (Ont)  
*Glycyphagus hypudaei* (NB)  
*Haemaphysalis leporis-palustris* (NS)  
*Haemogamasus ambulans* (NB, NS)  
*H. reidi* (NB)  
*Haemogamasus* spp. (NS)  
*Haemolaelaps glasgowi* (Ont)  
*Hirstionyssus* sp. (NS)  
*Hyperlaelaps* sp. (NS)  
*Ixodes angustus* (NB, NS)  
*I. muris* (PEI)  
*Ixodes* spp. (Ont)  
Labidophorids (Ont)  
*Laelaps kochi* (Ont)  
*Laelaps* sp. (NS)  
Listrophoridae gen. spp. (Ont)  
*Listrophorus mexicanus* (NB, Que)  
*Macronyssus crosbyi* (NS)  
*Miyatrombicula esoensis* (NB)  
*Myobia* spp. (Que)  
Myobiidae gen. spp. (Ont)  
*Myocoptes j. japonensis* (NB)  
*M. squamosus* (NB)  
*Myocoptes* spp. (Que)  
*Neotrombicula harperi* (NB)  
*N. microti* (NB)  
*Pygmephorus horridus* (NB)  
*Radfordia lemnina* (NB)  
*Radfordia* spp. (Que)  
Sarcoptidae gen. sp. (Ont)  
*Trichoeocius tenax* (NB)  
*Trombicula* spp. (NS, Que)  
Trombiculidae gen. spp. (Ont)
- UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus athabascaae* (Alta, BC, Man, Nfld, NWT, Que, Sask)  
*A. dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)  
*Atyphloceras bishopi* (Man, Nfld, Ont, Que)

*Catallagia borealis* (Man, NB, Ont, Que)  
*C. charlottensis* (Alta, BC)  
*C. dacenkoi fulleri* (Alta, BC, Man, NWT, YT)  
*C. decipiens* (Alta, BC, Man, Sask, YT)  
*C. jellisoni* (Alta, BC, YT)  
*Ceratophyllus gallinae* (Man)  
*C. wagneri systaltus* (Man)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)  
*Ctenopsyllus selenis* (Alta, BC)  
*Delotelis hollandi* (Alta, BC)  
*D. telegoni* (Alta, BC)  
*Epiteidia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystriehopsylla d. dippiei* (Man)  
*H. d. truncata* (BC)  
*H. o. occidentalis* (Alta, BC)  
*Malaraeus telchinus* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. asio* (Ont)  
*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. a. megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus thambus* (Alta, BC, Nfld, NWT, Que, YT)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*M. wagneri systaltus* (Alta, Man, Ont, Sask)  
*Nearctopsylla g. genalis* (NB)  
*Nopsylla inopina* (Alta, BC, Sask)  
*Opisodasys k. keeni* (Alta, BC)  
*O. pseudarctomys* (Alta, Ont)  
*Orchopeas caedens durus* (NB)  
*O. leucopus* (Man)  
*O. sexdentatus agilis* (Alta, BC, YT)  
*Peromyscopsylla catatina* (Man, NB, Nfld, NS, Ont, Que)  
*P. h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Sask)  
*P. selenis* (Alta, BC, Man, NWT, Sask, YT)  
*Rhadinopsylla arborea* (Alta, BC)  
*R. fraterna* (BC, Sask)  
*R. media* (Alta, Que)  
*Stenoponia americana* (Alta, Man, NB, NS, Ont, Que)  
*Trichopsylla quirini* (Alta)  
SIPHUNCULATA  
*Hoplopleura acanthopus* (Ont)  
*H. hesperomydis* (Que)

*Clethrionomys gapperi athabascaae* (Preble)

UNIRAMIA

SIPHONAPTERA

*Amalaraeus athabascaae* (Alta, BC, Man, Nfld, NWT, Que, Sask)

*A. dissimilis* (Alta, BC, NWT, YT)

*Amphipsylla sibirica pollionis* (Alta)

*Catallagia dacenkoi fulleri* (Alta, BC, Man, NWT, YT)

*Epiteidia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, PEI, Que, Sask, YT)

*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask, YT)

*Rhadinopsylla linta* (BC, NWT, YT)

*Clethrionomys gapperi cascadiensis* Booth

UNIRAMIA

SIPHONAPTERA

*Catallagia charlottensis* (BC)

*Clethrionomys gapperi caurinus* (Bailey)

UNIRAMIA

SIPHONAPTERA

*Catallagia charlottensis* (BC)

*Hystriehopsylla o. occidentalis* (BC)

*Clethrionomys gapperi gapperi* (Vigors)

UNIRAMIA

SIPHONAPTERA

*Megabothris quirini* (Alta, BC, Nfld, NWT, Ont, Que)

*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*Clethrionomys gapperi gaspeanus* Anderson

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (NB)

*Megabothris quirini* (NB)

*Peromyscopsylla catatina* (NB)

*Clethrionomys gapperi loringi* (Bailey)

UNIRAMIA

SIPHONAPTERA

*Amphipsylla sibirica pollionis* (Alta)

*Atyphloceras bishopi* (Man)

*Catallagia borealis* (Man)

*C. decipiens* (Alta, BC)

*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

*Epiteidia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Hystriehopsylla d. dippiei* (Alta, BC, Man)

*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*M. wagneri systaltus* (Alta, Man, Ont, Sask)

*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

*Peromyscopsylla catatina* (Man, Nfld, NS, Ont)

*P. h. hamifer* (Man)

*P. selenis* (Alta, Man, NWT, Sask, YT)



*Scaphiopsylla bishopi* (Man)  
*Stenoponia americana* (Man, NS, Ont, Que)

*Clethrionomys gapperi ochraceus* (Miller)

UNIRAMIA

SIPHONAPTERA

*Catallagia borealis* (Man, NB, Ont, Que)  
*Ctenophthalmus p. pseudagyrtes* (NB)  
*Epitedia w. wenmanni* (NB)  
*Orchopeas leucopus* (NB)  
*Peromyscopsylla catatina* (NB)  
*Stenoponia americana* (NB)

*Clethrionomys gapperi pallescens* Hall and Cockrum

CHELICERATA

ACARI

*Dermacentor variabilis* (NS)  
*Haemaphysalis leporis-palustris* (NS)  
*Ixodes angustus* (NS)

*Clethrionomys gapperi proteus* (Bangs)

UNIRAMIA

SIPHONAPTERA

*Amalaraeus athabascaae* (Alta, BC, Man, Nfld, NWT, Que, Sask)  
*Atyphloceras bishopi* (Nfld, Man, Ont, Que)  
*Catallagia borealis* (Ont, Que)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla catatina* (Man, Nfld, NS, Ont, Que)  
*P. h. hamifer* (Alta, Nfld, NWT, Ont, Que)  
*Rhadinopsylla media* (Alta, Que)

*Clethrionomys gapperi saturatus* (Rhoads)

Syn.: *Evotomys gapperi saturatus* Rhoads

UNIRAMIA

SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT)  
*Amphipsylla sibirica pollionis* (Alta)  
*Catallagia charlottensis* (Alta)  
*C. decipiens* (Alta, BC, Sask)  
*Ctenophthalmus p. pseudagyrtes* (Alta)  
*Delotelis telegoni* (Alta)  
*Hystriropsychylla dippiei truncata* (BC)  
*Malaraeus telchinus* (BC)  
*Megabothris abantis* (Alta, BC)  
*M. quirini* (Alta, BC, NWT, Ont)  
*Nearctopsylla hyrtaci* (BC)  
*Neopsylla inopina* (Alta)  
*Orchopeas sexdentatus agilis* (BC)  
*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask)  
*Trichopsylla quirini* (Alta)

SIPHUNCULATA

*Hoplopleura acanthopus* (BC)

*Clethrionomys gapperi ungava* (Bailey)

Syn.: *Evotomys ungava* Bailey

UNIRAMIA

SIPHONAPTERA

*Amalaraeus athabascaae* (Alta, BC, Man, Nfld, NWT, Que, Sask)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris asio* (Nfld)  
*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Clethrionomys rutilus* Pallas Northern red-backed mouse

CHELICERATA

ACARI

*Haemogamasus ambulans* (NWT)  
*Hirstionyssus isabellinus* (NWT)  
*Laelaps clethrionomydis* (NWT)  
*Myocoptes* spp. (NWT)

UNIRAMIA

SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)  
*Catallagia dacenkoi fulleri* (Alta, BC, Man, NWT, YT)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. calcifer gregsoni* (NWT, YT)  
*M. groenlandicus* (Man, Nfld, NWT, Que, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus thambus* (Alta, BC, Nfld, NWT, Que, YT)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)  
*Peromyscopsylla h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Sask)  
*P. selenis* (Alta, BC, Man, NWT, Sask, YT)

SIPHUNCULATA

*Polyplax alaskensis* (NWT)

*Clethrionomys rutilus dawsoni* (Merriam)

Syn.: *Clethrionomys dawsoni* (Merriam)

*Clethrionomys dawsoni dawsoni* (Merriam)

UNIRAMIA

SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)  
*Catallagia dacenkoi fulleri* (Alta, BC, Man, NWT, YT)  
*C. decipiens* (Alta, BC, Man, Sask, YT)  
*C. jellisoni* (Alta, BC, YT)  
*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)

- C. lunatus tundrensis* (NWT, Que)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystriehopsylla o. occidentalis* (BC)  
*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask, YT)  
*Rhadinopsylla linta* (BC, NWT, YT)
- Clethrionomys* spp.
- CHELICERATA  
ACARI  
*Ixodes angustus* (Alta)
- UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus athabasca* (BC, Man, Nfld, NWT, Que, Sask)  
*A. dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)  
*Atyphloceras bishopi* (Man, Nfld, Ont, Que)  
*Catallagia charlottensis* (BC)  
*C. dacenkoi fulleri* (Alta, BC, Man, YT)  
*C. decipiens* (Alta, BC, Man, Sask, YT)  
*C. sculleni chamberlini* (BC)  
*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ctenophthalmus p. pseudagyrtis* (Alta, BC, Man, NB, NS, Ont, PEI, Que)  
*Delotelis hollandi* (Alta, BC)  
*Hystriehopsylla o. occidentalis* (Alta, BC)  
*Malaraeus euphorbi* (Alta, BC, NWT, Sask)  
*M. telchinus* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. acerbus* (Man, Ont)  
*M. asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*M. wagneri systaltus* (Alta, Man, Ont, Sask)  
*Opisodasys k. keeni* (Alta, BC)  
*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*O. leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)  
*Peromyscopsylla catatina* (Man, Nfld, NS, Ont)  
*P. hesperomys adelpha* (Alta, Sask)  
*P. selenis* (Alta, BC, Man, NWT, Sask, YT)
- Rhadinopsylla arborea* (Alta, BC)  
*R. linta* (BC, NWT, YT)  
*Stenoponia americana* (Man, NS, Ont, Que)
- Dicrostonyx groenlandicus* (Traill) Collared lemming
- CHELICERATA  
ACARI  
*Haemogamasus ambulans* (NWT)  
*Hirstionyssus isabellinus* (NWT)  
*Laelaps alaskensis* (NWT)  
*Pygmephorus* spp. (NWT)
- UNIRAMIA  
SIPHONAPTERA  
*Megabothris calcarifer gregsoni* (NWT, YT)  
*M. groenlandicus* (NWT)  
SIPHUNCULATA  
*Hoplopleura acanthopus* (NWT)
- Dicrostonyx groenlandicus kilangmiutuk* Anderson and Rand
- UNIRAMIA  
SIPHONAPTERA  
*Megabothris groenlandicus* (NWT)
- Dicrostonyx groenlandicus richardsoni* Merriam  
Syn.: *Dicrostonyx torquatus richardsoni* Merriam
- UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus lunatus tundrensis* (NWT, Que)  
*Megabothris asio megacolpus* (Man)  
*M. groenlandicus* (Man, Nfld, YT)
- Dicrostonyx hudsonius* (Pallas) Labrador collared lemming
- UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)  
*C. lunatus tundrensis* (NWT, Que)  
*Megabothris asio megacolpus* (Que)  
*M. groenlandicus* (Man, Nfld, NWT, Que, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NWT, Ont, Que, Sask, YT)
- Dicrostonyx* spp.
- CHELICERATA  
ACARI  
*Listrophorus dicrostonyx* (NWT)  
*Myocoptes japonensis canadensis* (Ont)
- UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)  
*Megabothris asio megacolpus* (Que)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. groenlandicus* (Nfld, Que, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Oropsylla alaskensis* (NWT, YT)



*Lagurus curtatus* (Cope) Sagebrush vole

UNIRAMIA

SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Man, Sask, YT)

*Megabothris c. clantoni* (BC)

*Monopsyllus wagneri systaltus* (Alta, Man, Ont, Sask)

*Peromyscopsylla hesperomys adelpha* (Alta, Sask)

*Rhadinopsylla fraterna* (BC, Sask)

*Lemmus sibiricus* Kerr Brown lemming

Syn.: *Lemmus trimucronatus* (Richardson)

UNIRAMIA

SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)

*Megabothris calcarifer gregsoni* (NWT, YT)

*M. groenlandicus* (Man, Nfld, NWT, Que, YT)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Rhadinopsylla linta* (BC, NWT, YT)

*Lemmus sibiricus trimucronatus* (Richardson)

Syn.: *Lemmus t. trimucronatus* (Richardson)

UNIRAMIA

SIPHONAPTERA

*Catallagia dacenkoi fulleri* (Alta, BC, Man, YT)

*Megabothris groenlandicus* (Nfld, NWT, Que, YT)

SIPHUNCULATA

*Hoplopleura acanthopus* (NWT)

*Lemmus* spp.

UNIRAMIA

SIPHONAPTERA

*Megabothris calcarifer gregsoni* (NWT, YT)

*M. groenlandicus* (Man, Nfld, YT)

*Microtus chrotorrhinus* (Miller) Rock vole

CHELICERATA

ACARI

*Androlaelaps fahrenheitzi* (NB)

*Bakerdania* sp. (NB)

*Cyrtolaelaps* sp. (NB)

*Echinonyssus isabellinus* (NB)

*Eulaelaps stabularis* (NB)

*Euryparasitus* sp. (NB)

*Euschoengastia blarinae* (NB)

*E. setosa* (NB)

*Glycyphagus hypudaei* (NB)

*Haemogamasus ambulans* (NB)

*H. liponyssoides* (NB)

*Ixodes angustus* (NB)

*Laelaps alaskensis* (NB)

*L. kochi* (NB)

*Listrophorus mexicanus* (NB)

*Miyatrombicula esoensis* (NB)

*Myocoptes j. japonensis* (NB)

*M. squamosus* (NB)

*Neotrombicula harperi* (NB)

*Orycteroxenus canadensis* (NB)

*O. soricis* (NB)

*Pygmephorus horridus* (NB)

*Radfordia hylandia* (NB)

*R. lemnina* (NB)

*Radfordia* sp. (NB)

*Trichoecius tenax* (NB)

*Trichoecius* spp. (NB)

UNIRAMIA

SIPHONAPTERA

*Atyphloceras bishopi* (Man, Nfld, Ont, Que)

*Catallagia borealis* (NB)

*Ctenophthalmus p. pseudagyrtes* (NB)

*Epietidia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megabothris quirini* (NS)

*Peromyscopsylla catatina* (Man, NB, Nfld, NS, Ont)

*Microtus chrotorrhinus chrotorrhinus* (Miller)

UNIRAMIA

SIPHONAPTERA

*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*Peromyscopsylla catatina* (NB, Ont)

*Microtus longicaudus* (Merriam) Long-tailed vole

Syn.: *Microtus longicaudus mordax* (Merriam)

UNIRAMIA

SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)

*Catallagia decipiens* (Alta, BC, Man, Sask, YT)

*Delotelis hollandi* (Alta, BC)

*D. telegoni* (Alta, BC)

*Epietidia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Hystriehopsylla dippiei truncata* (BC)

*H. o. occidentalis* (BC)

*Malaraeus telchinus* (Alta, BC)

*Megabothris abantis* (Alta, BC, YT)

*M. calcarifer gregsoni* (NWT, YT)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megarhthroglossus d. divisus* (BC)

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Opisodasys k. keeni* (Alta, BC)

*Orchopeas sexdentatus agilis* (BC)

*Oropsylla idahoensis* (Alta, BC)

*Peromyscopsylla h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)

*P. selenis* (Alta, BC, Man, NWT, Sask, YT)

*Rhadinopsylla arborea* (Alta, BC)

SIPHUNCULATA

*Hoplopleura acanthopus* (BC)

*Microtus longicaudus macrurus* Merriam

UNIRAMIA



## SIPHONAPTERA

*Catallagia charlottensis* (BC)  
*Hystrihopsylla o. occidentalis* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man,  
 NWT, Sask, YT)

*Microtus longicaudus vellerosus* Allen

Syn.: *Microtus vellerosus* Allen

## UNIRAMIA

## SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Catallagia dacenkoi fulleri* (Alta, BC, Man,  
 YT)  
*Megabothris quirini* (Alta, BC, Man, NB,  
 Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man,  
 NWT, Sask, YT)  
 SIPHUNCULATA  
*Hoplopleura acanthopus* (BC)

*Microtus miurus* Osgood Singing vole

## UNIRAMIA

## SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Megabothris calcarifer gregsoni* (NWT, YT)  
*M. groenlandicus* (Man, Nfld, NWT, Que, Y

*Microtus montanus canescens* Bailey Montane vole

Syn.: *Microtus nanus canescens* Bailey

## UNIRAMIA

## SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Man, Sask,  
 YT)  
*Delotelis hollandi* (Alta, BC)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB,  
 Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystrihopsylla dippiei truncata* (BC)  
*Malaraeus telchimus* (Alta, BC)  
*Megabothris lucifer* (Alta, BC, Man, Sask)  
*Rhadinopsylla difficilis* (BC)  
 SIPHUNCULATA  
*Hoplopleura acanthopus* (BC)

*Microtus ochrogaster* (Wagner) Prairie vole

Syn.: *Pedomys ochrogaster* Baird

## UNIRAMIA

## SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtis* (Alta, BC,  
 Man, NB, NS, Ont, PEI, Que, Sask)  
*Megabothris asio megacolpus* (Alta, BC,  
 Man, NWT, Ont, Que, Sask, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS,  
 NWT, Ont, Que, Sask, YT)  
*Monopsyllus wagneri systaltus* (Alta, Man,  
 Ont, Sask)

*Microtus ochrogaster minor* (Merriam)

Syn.: *Microtus minor* of Hopkins and Rothschild  
 (1962)

## UNIRAMIA

## SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtis* (Alta, BC,

Man, NB, NS, Ont, PEI, Que, Sask)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB,  
 Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystrihopsylla d. dippiei* (Alta, BC, Man,  
 Ont)  
*Megabothris lucifer* (Alta, BC, Man, Sask)  
*Stenoponia americana* (Alta, Man, Que)

*Microtus oeconomus* (Pallas) Tundra vole

## UNIRAMIA

## SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC,  
 Nfld, YT)  
*Catallagia dacenkoi fulleri* (Alta, BC, Man,  
 YT)  
*Corrodopsylla c. curvata* (Alta, BC, Man,  
 NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystrihopsylla o. occidentalis* (BC)  
*Megabothris asio megacolpus* (Alta, BC,  
 Man, NWT, Ont, Que, Sask, YT)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS,  
 NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla ostsibirica longiloba* (YT)

*Microtus oeconomus macfarlani* Merriam

## UNIRAMIA

## SIPHONAPTERA

*Monopsyllus e. eumolpi* (Alta, BC, Man,  
 NWT, Ont, Sask, YT)

*Microtus oeconomus operarius* (Nelson)

Syn.: *Microtus operarius*

## UNIRAMIA

## SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Megabothris quirini* (Alta, BC, Man, NB,  
 Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man,  
 NWT, Sask, YT)

*Microtus oregoni* (Bachman) Creeping vole

## UNIRAMIA

## DIPTERA

*Cuterebra* spp. (BC)

*Microtus oregoni serpens* Merriam

Syn.: *Microtus serpens* Merriam

## CHELICERATA

## ACARI

*Leptinus americanus* (BC)

## UNIRAMIA

## SIPHONAPTERA

*Atyphloceras m. multidentatus* (BC)  
*Catallagia charlottensis* (BC)  
*Corrodopsylla curvata obtusata* (BC)  
*Corypsylla ornata* (BC)  
*Dasypsyllus gallinulae perpinnatus* (BC)  
*Delotelis hollandi* (Alta, BC)  
*Epitedia wenmanni* (BC)  
*Hystrihopsylla o. occidentalis* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)

*Monopsyllus ciliatus protinus* (BC)  
*M. wagneri ophidius* (BC)  
*Nearctopsylla traubi* (BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Peromyscopsylla hesperomys pacifica* (BC)  
*P. selenis* (Alta, BC, Man, NWT, Sask, YT)  
*Rhadinopsylla sectilis goodii* (BC)  
SIPHUNCULATA  
*Hoplopleura acanthopus* (BC)  
*Polyplax spinulosa* (BC)

*Microtus pennsylvanicus* (Ord) Meadow vole

#### CHELICERATA

##### ACARI

*Allothrombium* sp. (NS)  
*Androlaelaps fahrenheitzi* (NB, Sask)  
*Androlaelaps* sp. (NS)  
*Dermacentor variabilis* (Man, NS)  
*Echinonyssus isabellinus* (NB)  
*Eulaelaps stabularis* (NS, Sask)  
*Euryparasitus* sp. (NB)  
*Euschoengastia* spp. (NS, Sask)  
Glycyphagidae gen. spp. (Ont)  
*Glycyphagus hypudaei* (NB)  
*Haemaphysalis leporis-palustris* (PEI)  
*Haemogamasus ambulans* (NB)  
*Haemogamasus* sp. (NS)  
*Hirstionyssus* sp. (NS, Ont)  
*Hyperlaelaps* sp. (NS)  
*Ixodes angustus* (NS)  
*I. muris* (NB, NS, Ont, PEI)  
*Laelaps alaskensis* (NB, Ont)  
*L. kochi* (NB, Ont)  
*Laelaps* sp. (NS)  
Listrophoridae gen. spp. (Ont)  
*Listrophorus mexicanus* (NB)  
*L. m. squamiferus* (NWT)  
*Miyatrombicula esoensis* (NB)  
*Myobia* spp. (Que)  
Myobiidae gen. sp. (Ont)  
*Myocoptes j. japonensis* (NB)  
*M. squamosus* (NB)  
*Neotrombicula basignata* (NS)  
*N. harperi* (NB)  
*N. microti* (NS)  
*Ololaelaps* sp. (NS)  
*Protomyobia brevisetosus* (NB)  
*Psoregates canadensis* (Man, Ont)  
*Pygmephorus moreohorridus* (NB)  
*Radfordia hylandi* (NB)  
*Radfordia* spp. (Que)  
*Trichoecius tenax* (NB)

#### UNIRAMIA

##### SIPHONAPTERA

*Amalaraeus athabascae* (Alta, BC, Man, Nfld, NWT, Que, Sask)  
*A. dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)  
*Atyphloceras bishopi* (Man, Nfld, Ont, Que)  
*Catallagia borealis* (Man)  
*C. dacenkoi fulleri* (Alta, BC, Man, NWT, YT)

*C. decipiens* (Alta, BC, Man, Sask, YT)  
*C. jellisoni* (Alta, BC, YT)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ctenophthalmus p. pseudagyrtis* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)  
*Epidedia w. wemmanni* (NS)  
*Hystriehopsylla d. dippiei* (Alta, BC, Man, Sask)  
*H. d. truncata* (BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. asio* (NB, Ont)  
*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. a. megacolpus* (Ont)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. groenlandicus* (Man, Nfld, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*M. wagneri systaltus* (Alta, Man, Ont, Sask)  
*Opisocrostis bruneri* (Alta, Man, Sask)  
*Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla catatina* (Man, Nfld, NS, Ont)  
*P. h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)  
*P. h. markworthi* (Ont)  
*P. selenis* (Alta, BC, Man, NWT, Sask, YT)  
*Polyplax alaskensis* (NB)  
*Rhadinopsylla fraterna* (BC, Sask)  
*Thrassis petiolatus* (Alta, BC)  
SIPHUNCULATA  
*Hoplopleura acanthopus* (Ont, Sask)  
*Neohaematopinus semifasciatus* (Que)  
*Polyplax alaskensis* (NB)

*Microtus pennsylvanicus acadicus* Bangs

#### CHELICERATA

##### ACRAI

*Dermacentor variabilis* (NS)  
*Haemaphysalis leporis-palustris* (NS)  
*Ixodes angustus* (NS)  
*I. muris* (NS)

*Microtus pennsylvanicus drummondii* (Audubon and Bachman)

Syn.: *Microtus drummondii* (Audubon and Bachman)

#### UNIRAMIA

##### SIPHONAPTERA

*Amalaraeus athabascae* (BC, Man, Nfld, NWT, Que, Sask)  
*A. dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)  
*Catallagia dacenkoi fulleri* (Alta, BC, Man, NWT, YT)  
*C. decipiens* (Alta, BC, Sask)



*C. jellisoni* (Alta, BC)  
*Ctenophthalmus p. pseudagyrtes* (Alta, Man, Ont, Sask)  
*Ctenopsyllus selenis* (BC)  
*Delotelis telegoni* (BC)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Foxella ignota albertensis* (Man)  
*Hystrichopsylla dippiei truncata* (BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. asio* (NWT)  
*M. a. megalcolpus* (BC, Man, NWT, Sask)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. lucifer* (Alta, BC, Sask)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus e. eumolpi* (BC)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)  
*Peromyscopsylla catatina* (Man)  
*P. h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Sask)  
*P. selenis* (BC, Man, NWT, Sask, YT)  
*Rhadinopsylla fraterna* (Alta, BC, Sask)  
*Trichopsylla lucifer* (Alta)  
 SIPHUNCULATA  
*Hoplopleura acanthopus* (BC)

*Microtus pennsylvanicus enixus* Bangs

Syn.: *Microtus enixus* Bangs

CHELICERATA

ACARI

*Ixodes muris* (Nfld)

UNIRAMIA

SIPHONAPTERA

*Epitedia w. wenmanni* (Nfld)

*Megabothris asio* (Nfld)

*M. a. asio* (Nfld)

*M. quirini* (Nfld)

*Peromyscopsylla h. hamifer* (Alta, BC, Man,

Nfld, NWT, Ont, Que, Sask)

*Microtus pennsylvanicus insperatus* (Allen)

UNIRAMIA

SIPHONAPTERA

*Megabothris quirini* (Alta, BC, NWT, Ont)

*Microtus pennsylvanicus labradorius* Bailey

UNIRAMIA

SIPHONAPTERA

*Megabothris asio megalcolpis* (Alta, BC, Man, NWT, Ont, Que, Sask)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Peromyscopsylla h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)

*Microtus pennsylvanicus pennsylvanicus* (Ord)

CHELICERATA

ACARI

*Androlaelaps fahrenheitsi* (Ont)

*Laelaps kochi* (Ont)

*L. muris* (Ont)

*Listrophorus leuckarti* (Ont)

UNIRAMIA

SIPHONAPTERA

*Atyphloceras bishopi* (Ont, Que)

*Ctenophthalmus p. pseudagyrtes* (Ont, Que)

*Epitedia w. wenmanni* (Alta, BC, Man, NB,

NWT, Ont, Que, Sask)

*Megabothris a. asio* (Que)

*M. quirini* (Alta, BC, NWT, Ont)

*Nosopsyllus fasciatus* (Que)

*Orchopeas leucopus* (Alta, BC, Man, NWT,

Ont, Que, Sask, YT)

*Peromyscopsylla h. hamifer* (Que)

SIPHUNCULATA

*Hoplopleura acanthopus* (Ont)

*Microtus pennsylvanicus terraenovae* (Bangs)

UNIRAMIA

SIPHONAPTERA

*Megabothris a. asio* (Nfld)

*Microtus pinetorum scalopsoides* (Audubon and Bachman) Pine vole

Syn.: *Pitymys pinetorum scalopsoides* Batchelder

CHELICERATA

ACARI

*Androlaelaps fahrenheitsi* (Ont)

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus pseudagyrtes* (Ont)

*Hystrichopsylla tahavuana* (Ont)

*Microtus richardsoni* (DeKay) Water vole

UNIRAMIA

SIPHONAPTERA

*Catallagia sculleni chamberlini* (BC)

*Megabothris abantis* (Alta, BC, YT)

*Microtus richardsoni richardsoni* (DeKay)

UNIRAMIA

SIPHONAPTERA

*Megabothris abantis* (Alta, BC)

*Microtus townsendii* (Bachman) Townsend's vole

UNIRAMIA

DIPTERA

*Cuterebra* spp. (BC)

*Wohlfahrtia vigil* (BC)

SIPHONAPTERA

*Delotelis hollandi* (Alta, BC)

*Hystrichopsylla o. occidentalis* (BC)

*Megabothris abantis* (BC)

*Opisodasys k. keeni* (Alta, BC)

SIPHUNCULATA

*Hoplopleura acanthopus* (BC)

*Microtus townsendii tetramerus* (Rhoads)

Syn.: *M. tetramerus*

UNIRAMIA

SIPHONAPTERA

*Atyphloceras m. multidentatus* (BC)

*Catallagia charlottensis* (BC)

*Nosopsyllus fasciatus* (BC, Man, Nfld, NS, Ont, Que)



*Microtus townsendii townsendii* (Bachman)

UNIRAMIA

SIPHONAPTERA

*Catallagia charlottensis* (BC)

*Corypsylla ornata* (BC)

*Delotelis hollandi* (BC)

*Epitedia wenmanni* (BC)

*Megabothris abantis* (Alta, BC, YT)

*Opisodasys k. keeni* (Alta, BC)

*Peromyscopsylla selenis* (Alta, BC, Man,

NWT, Sask, YT)

*Microtus xanthognathus* (Leach) Yellow-cheeked vole

UNIRAMIA

SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)

*Megabothris calcarifer gregsoni* (NWT, YT)

*M. groenlandicus* (Man, Nfld, NWT, Que, YT)

*Peromyscopsylla h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Sask)

*Microtus* spp.

UNIRAMIA

SIPHONAPTERA

*Amalaraeus athabascae* (Alta, BC, Man, Nfld, NWT, Que, Sask)

*A. dissimilis* (Alta, BC, NWT, YT)

*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)

*Atyphlocera bishopi* (Man, Nfld, Ont, Que)

*Catallagia charlottensis* (BC)

*C. dacenkoi fulleri* (Alta, BC, Man, NWT, YT)

*C. decipiens* (Alta, BC, Man, Sask, YT)

*C. sculleni chamberlini* (BC)

*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)

*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Ctenophthalmus p. pseudagyrtis* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask, YT)

*Delotelis telegoni* (Alta, BC)

*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Hystrichopsylla d. dippiei* (Alta, BC, Man)

*H. o. occidentalis* (BC)

*H. tahavuaana* (Que)

*Malaraeus telchinus* (Alta, BC)

*Megabothris abantis* (Alta, BC, YT)

*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)

*M. a. megacolpus* (Alta, BC, Man, NWT, Ont, Sask)

*M. calcarifer gregsoni* (NWT, YT)

*M. groenlandicus* (Nfld, Que, YT)

*M. lucifer* (Alta, BC, Man, Sask)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Monopsyllus thambus* (Alta, BC, Nfld, NWT, Que, YT)

*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*M. wagneri ophidius* (BC)

*M. w. systaltus* (Alta, Man, Ont, Sask)

*M. w. wagneri* (Alta, BC)

*Nearctopsylla hyrtiaci* (Alta, BC)

*Opisocrostitis t. tuberculatus* (Alta, BC, Sask, YT)

*Opisodasys k. keeni* (Alta, BC)

*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Peromyscopsylla catatina* (Man)

*P. h. hamifer* (Alta, BC, Man, Nfld, NWT, Ont, Sask)

*P. h. hesperomys* (NS, Ont, Que)

*P. ostsibirica longiloba* (YT)

*P. selenis* (Alta, BC, Man, NWT, Sask, YT)

*Rhadinopsylla linta* (BC, NWT, YT)

*Mus musculus* L. House mouse

Syn.: *Mus musculus musculus* L.

CHELICERATA

ACARI

Myobiidae gen. spp. (Ont)

UNIRAMIA

DIPTERA

*Cuterebra fontinella* (Ont)

*Cuterebra* spp. (Ont)

SIPHONAPTERA

*Epitedia w. wenmanni* (Alta, BC, Man, NB, NWT, Ont, Sask)

*Leptopsylla segnis* (BC, Nfld)

*Malaraeus telchinus* (Alta, BC)

*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)

*Monopsyllus wagneri systaltus* (Alta, Man, Ont, Sask)

*Myodopsylla palposa* (BC)

*Nosopsyllus fasciatus* (BC)

*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Rhadinopsylla s. sectilis* (BC)

SIPHUNCULATA

*Hoplopleura hesperomydis* (Ont)

*Mus* spp.

UNIRAMIA

SIPHONAPTERA

*Malaraeus bitterrootensis* (Alta)

*M. telchinus* (Alta, BC)

*Megarhroglossus d. divisus* (Alta)

*Peromyscopsylla h. hamifer* (Alta, BC, Nfld, Ont, Que)

*Rhadinopsylla s. sectilis* (BC)

*Stenistomera alpina* (Alta)

*Stenopina americana* (Alta, Man, Que)

*Trichopsylla bitterrootensis* (Alta)

*Neotoma cinerea* (Ord) Bushy-tailed wood rat

CHELICERATA

ACARI

*Ixodes ochotonae* (BC)

UNIRAMIA

## SIPHONAPTERA

*Anomiopsyllus montanus* (Alta)  
*Catallagia charlottensis* (Alta, BC)  
*C. decipiens* (Alta, BC, Sask)  
*C. jellisoni* (Alta, BC, YT)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Malaraeus bitterrootensis* (BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megarhroglossus d. divisus* (Alta)  
*M. d. exsecatus* (BC)  
*M. spenceri* (BC)  
*Monopsyllus e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*Opisodasys k. keeni* (Alta, BC)  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)  
*Peromyscopsylla ravalliensis* (Alta, BC)  
*Rhadinopsylla arborea* (Alta, BC)  
*Stenistomera alpina* (Alta)

*Neotoma cinerea cinerea* (Ord)

## CHELICERATA

## ACARI

*Dermacentor andersoni* (Alta)  
*Ixodes spinipalpus* (Alta)

## UNIRAMIA

## SIPHONAPTERA

*Orchopeas sexdentatus agilis* (Alta, BC, YT)

*Neotoma cinerea drummondii* (Richardson)

## UNIRAMIA

## SIPHONAPTERA

*Megabothris abantis* (Alta, BC, YT)  
*Megarhroglossus d. divisus* (Alta, BC)  
*Monopsyllus w. wagneri* (Alta, BC)  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)  
*Rhadinopsylla arborea* (Alta, BC)  
*R. fraterna* (Alta, BC, Sask)

*Neotoma cinerea occidentalis* Baird

Syn.: *Neotoma cinerea saxamans* Osgood

## UNIRAMIA

## SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Megabothris abantis* (Alta, BC)  
*Megarhroglossus sicamus* (BC)  
*M. p. procus* (BC)  
*Orchopeas sexdentatus agilis* (Alta, BC, YT)  
*Peromyscopsylla ravalliensis* (BC)  
*Rhadinopsylla linta* (BC, NWT, YT)  
SIPHUNCULATA  
*Hoplopleura acanthopus* (BC)  
*Neohaematopinus inornatus* (BC)

*Neotoma* spp.

## UNIRAMIA

## SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Malaraeus bitterrootensis* (Alta)

*Megarhroglossus d. divisus* (Alta)

*M. sicamus* (BC)

*Monopsyllus e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)

*M. w. wagneri* (Alta, BC)

*Orchopeas sexdentatus agilis* (Alta, BC, YT)

*Peromyscopsylla ravallaensis* (Alta, BC)

*Rhadinopsylla difficilis* (BC)

*Ondatra zibethicus* (L.) Muskrat

## CHELICERATA

*Dermacarus ondatrae* (Man, NS)

*Dermacentor variabilis* (NS)

*Laelaps multispinosus* (Man, NS, Ont)

*Laelaps* spp. (BC)

*Listrophorus americanus* (Man)

*L. ondatrae* (NWT)

*L. validus* (Ont)

*Neotrombicula microti* (NS)

*Ondatra zibethicus osoyoosensis* (Lord)

## CHELICERATA

## ACARI

*Dermacarus validus* (BC)

*Eutrombicula harperi* (BC)

*Laelaps multispinosa* (BC)

*Listrophorus americanus* (BC)

*Radfordia* spp. (BC)

*Ondatra zibethicus zibethicus* (L.)

## CHELICERATA

## ACARI

*Dermacentor variabilis* (NS)

*Laelaps muris* (Ont)

## UNIRAMIA

## SIPHONAPTERA

*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*Ondatra* spp.

## UNIRAMIA

## SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Onychomys leucogaster* Baird

Northern  
grasshopper mouse

## UNIRAMIA

## SIPHONAPTERA

*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Onychomys leucogaster missouriensis* (Audubon and Bachman)

## UNIRAMIA

## SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Sask)

*Rhadinopsylla fraterna* (Alta, BC, Sask)

*Peromyscus leucopus* (Rafinesque)

White-footed  
mouse

## CHELICERATA

## ACARI

*Androlaelaps* sp. (NS)

- Dermacentor variabilis* (NS)  
*Eulaelaps stabularis* (NS)  
*Haemogamasus* sp. (NS)  
*Hypoaspis* sp. (NS)  
*Ixodes angustus* (NS)  
*Neotrombicula microti* (NS)  
*Trombicula* sp. (NS)
- UNIRAMIA  
 DIPTERA  
*Cuterebra angustifrons* (Ont)
- SIPHONAPTERA  
*Catallagia charlottensis* (Alta, BC)  
*Ctenophthalmus p. pseudagyrtes* (NS)  
*Epitedia w. wenmanni* (Alta, NS)  
*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus vison* (NS)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)  
*Peromyscopsylla h. hesperomys* (NS, Ont, Que)  
*P. scotti* (Ont)
- Peromyscus leucopus caudatus* Smith
- CHELICERATA  
 ACARI  
*Ixodes muris* (NS)
- Peromyscus leucopus noveboracensis* (Fischer)
- UNIRAMIA  
 DIPTERA  
*Cuterebra angustifrons* (Ont)  
*C. grisea* (Ont)  
*Cuterebra* spp. (Ont)
- SIPHONAPTERA  
*Ctenophthalmus p. pseudagyrtes* (Alta, Man, Ont, Sask)  
*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
- Peromyscus maniculatus* (Wagner) Deer mouse  
 Syn.: *Peromyscus canadensis* of Rothschild (1906)
- CHELICERATA  
 ACARI  
*Androlaelaps casalis* (NB)  
*A. fahrenheiti* (NB)  
*Androlaelaps* sp. (NS)  
*Bakerdania* spp. (NB)  
*Cyrtolaelaps* spp. (NB)  
*Dermacarus jonesi* (BC)  
*Dermacarus* spp. (NB)  
*Dermacentor variabilis* (Man, NS)  
*Eulaelaps stabularis* (NB)  
*Euschoengastia setosa* (NB)  
 Glycyphagidae gen. spp. (Ont)  
*Glycyphagus hypudaei* (NB)  
*Haemolaelaps glasgowi* (Ont)  
*Hirstionyssus* spp. (NS, Ont)  
*Ixodes angustus* (NB)  
*I. muris* (PEI)  
*Ixodes* spp. (Ont)  
 Labidophorids (Ont)  
*Miyatrombicula esoensis* (NB)
- Myobia* spp. (Que)  
 Myobiidae gen. spp. (Ont)  
*Myocoptes* spp. (Que)  
*Proctolaelaps* spp. (NB)  
*Psorergates watsoni* (Ont)  
*Radfordia subuliger* (NB)  
*Radfordia* spp. (Que)  
*Trichoecius* spp. (NB)  
 Trombiculidae gen. spp. (Ont)
- UNIRAMIA  
 DIPTERA  
*Cuterebra grisea* (BC)  
*Cuterebra* spp. (Ont)
- SIPHONAPTERA  
*Amalaraeus athabascaae* (BC, Man, Nfld, NWT, Que, Sask)  
*A. dissimilis* (Alta, BC, NWT, YT)  
*Amphipsylla sibirica pollionis* (Alta, BC, Nfld, YT)  
*Atyphloceras m. multidentatus* (BC)  
*Callistopsyllus t. terimus* (BC)  
*Catallagia borealis* (Man)  
*C. charlottensis* (BC)  
*C. decipiens* (Alta, BC, Man, Sask, YT)  
*C. jellisoni* (Alta, BC, YT)  
*C. mathesoni* (BC)  
*C. s. sculleni* (BC)  
*Catallagia* spp. (Man)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ctenophthalmus p. pseudagyrtes* (NB, Ont, Que)  
*Ctenopsyllus selenis* (BC)  
*Delotelis hollandi* (BC)  
*Epitedia scapani* (BC)  
*E. w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hoplopleura hesperomydis* (NB)  
*Hystrichopsylla d. dippiei* (Alta, BC, Man, Sask)  
*H. d. spinata* (BC)  
*H. d. truncata* (BC)  
*H. o. occidentalis* (BC)  
*Malaraeus euphorbi* (Alta, BC, NWT, Sask)  
*M. telchinus* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. asio* (NB)  
*M. a. megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megarhroglossus divisus exsecatus* (BC)  
*M. p. procus* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*M. thambus* (Alta, BC, Nfld, NWT, Que, Sask, YT)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*M. wagneri ophidius* (BC)



*M. w. systaltus* (Alta, Man, Ont, Sask)  
*M. w. wagneri* (Alta, BC)  
*Nosopsyllus fasciatus* (BC, Ont, Que, Sask)  
*Opisodasys k. keeni* (Alta, BC)  
*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)  
*O. c. durus* (NS)  
*O. leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)  
*Peromyscopsylla catatina* (NWT, Que)  
*P. h. hesperomys* (NS)  
*P. h. hesperomys* (NS)  
*P. h. pacifica* (BC)  
*P. ravalliensis* (BC)  
*P. selenis* (Alta, BC, Man, NWT, Sask, YT)  
*Rhadinopsylla fraterna* (BC, Sask)  
*R. linta* (BC, NWT, YT)  
*R. sectilis goodi* (BC)  
*R. s. sectilis* (BC)  
*Stenistomera alpina* (Alta)  
 SIPHUNCULATA  
*Hoplopleura hesperomydis* (NB, NS, Ont, Que)

*Peromyscus maniculatus abietorum* Bangs

CHELICERATA

ACARI

*Dermacentor variabilis* (NS)

UNIRAMIA

SIPHONAPTERA

*Catallagia borealis* (NB)  
*Ctenophthalmus p. pseudagyrtes* (NB)  
*Epitedia w. wenmanni* (NB)  
*Malariaeus euphorbi* (Alta, BC, Sask)  
*M. telchinus* (Alta, BC)  
*Orchopeas caedens durus* (NB)  
*O. leucopus* (NB)  
*Stenoponia americana* (NB)

*Peromyscus maniculatus algidus* Osgood

UNIRAMIA

SIPHONAPTERA

*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus thambus* (Alta, BC, Nfld, NWT, Que, YT)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

*Peromyscus maniculatus alpinus* Cowan

UNIRAMIA

SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Hystrichopsylla o. occidentalis* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)  
*Monopsyllus w. wagneri* (Alta, BC)  
*Opisodasys k. keeni* (Alta, BC)

*Peromyscus maniculatus anticostiensis* Moulthrop

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

*Peromyscus maniculatus artemisiae* (Rhoads)

UNIRAMIA

SIPHONAPTERA

*Callistopsyllus t. terinus* (BC)  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystrichopsylla dippei truncata* (BC)  
*Megabothris abantis* (Alta, BC)  
*M. quirini* (Alta, BC, NWT, Ont)  
*Meringis shannoni* (BC)  
*Monopsyllus e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*M. w. wagneri* (Alta, BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Rhadinopsylla s. sectilis* (BC)  
 SIPHUNCULATA  
*Hoplopleura hesperomydis* (BC)

*Peromyscus maniculatus austerus* (Baird)

CHELICERATA

ACARI

*Radfordia subuliger* (BC)  
*Trombicula* spp. (BC)

UNIRAMIA

DIPTERA

*Cuterebra grisea* (BC)  
*Cuterebra* spp. (BC)  
 SIPHONAPTERA  
*Atyphloceras m. multidentatus* (BC)  
*Catallagia charlottensis* (BC)  
*C. s. sculleni* (BC)  
*Delotelis hollandi* (Alta, BC)  
*Epitedia scapani* (BC)

*Hystrichopsylla o. occidentalis* (BC)  
*Malariaeus telchinus* (Alta, BC)  
*Megabothris abantis* (Alta, BC)  
*Monopsyllus cileatus protinus* (BC)  
*M. wagneri ophidius* (BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Peromyscopsylla hesperomys pacifica* (BC)  
*Rhadinopsylla sectilis goodi* (BC)  
 SIPHUNCULATA  
*Hoplopleura hesperomydis* (BC)

*Peromyscus maniculatus bairdii* (Hoy and Kennicott)

UNIRAMIA

SIPHONAPTERA

*Catallagia borealis* (Man, NB, Ont, Que)  
*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Foxella ignota albertensis* (Man)  
*Hystrichopsylla d. dippei* (Alta, BC, Man)

- Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus wagneri systaltus* (Alta, Man, Ont, Sask)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla catatina* (Man, Nfld, NS, Ont)
- Peromyscus maniculatus borealis* Mearns  
 Syn.: *Peromyscus arcticus* of Rothschild, 1905  
 UNIRAMIA  
 SIPHONAPTERA  
*Amalaraeus dissimilis* (BC)  
*Catallagia charlottensis* (Alta, BC)  
*C. decipiens* (Alta, BC, Man, Sask, YT)  
*Ctenophthalmus p. pseudagyrtes* (Alta, Man, Ont, Sask)  
*Eptedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Malaraeus telchinus* (BC)  
*Megabothris abantis* (Alta, BC)  
*M. asio megacolpus* (Man)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Monopsyllus thambus* (Alta, BC, Nfld, NWT, Que, YT)  
*M. w. wagneri* (Alta, BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla selenis* (BC, Man, NWT, Sask, YT)  
 SIPHUNCULATA  
*Polyplax auricularis* (Alta)
- Peromyscus maniculatus gracilis* (Le Conte)  
 UNIRAMIA  
 DIPTERA  
*Cuterebra* spp. (Ont)  
 SIPHONAPTERA  
*Atyphloceras bishopi* (Que)  
*Eptedia w. wenmanni* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)  
*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*Stenoponia americana* (Man, Ont, Que)
- Peromyscus maniculatus interdictus* Anderson  
 UNIRAMIA  
 SIPHONAPTERA  
*Catallagia charlottensis* (BC)  
*Malaraeus telchinus* (BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Peromyscopsylla hesperomys pacifica* (BC)
- Peromyscus maniculatus keeni* (Rhoads)  
 UNIRAMIA  
 SIPHONAPTERA  
*Catallagia charlottensis* (BC)  
*Opisodasys k. keeni* (Alta, BC)
- Peromyscus maniculatus macrorhinus* (Rhoads)  
 UNIRAMIA  
 SIPHONAPTERA  
*Catallagia charlottensis* (BC)
- Peromyscus maniculatus maniculatus* (Wagner)  
 UNIRAMIA  
 DIPTERA  
*Cuterebra* spp. (Ont)  
 SIPHONAPTERA  
*Monopsyllus w. wagneri* (Alta, BC)
- Peromyscus maniculatus nebrascensis* (Coues)  
 Syn.: *Peromyscus maniculatus osgoodi* Mearns  
 UNIRAMIA  
 SIPHONAPTERA  
*Callistopsyllus terinus campestris* (Alta, Sask)  
*Catallagia decipiens* (Alta, BC, Sask)  
*Eptedia w. wenmanni* (Alta, BC, Man, NB, NWT, Ont, Sask)  
*Hystrihopsylla d. dippei* (Alta, Sask)  
*Malaraeus euphorbi* (Alta, BC, Sask)  
*Megabothris lucifer* (Alta, BC, Sask)  
*Monopsyllus wagneri systaltus* (Alta, Man, Ont, Sask)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*Rhadinopsylla fraterna* (Alta, BC, Sask)  
*R. rauschi* (Sask)
- Peromyscus maniculatus oreas* Bangs  
 UNIRAMIA  
 SIPHONAPTERA  
*Catallagia charlottensis* (BC)  
*Delotelis hollandi* (Alta, BC)  
*Eptedia scapanus* (BC)  
*Malaraeus telchinus* (BC)  
*Megabothris abantis* (Alta, BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. wagneri ophidius* (BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Peromyscopsylla hesperomys pacifica* (BC)  
*Rhadinopsylla sectilis goodi* (BC)  
 SIPHUNCULATA  
*Hoplopleura hesperomydis* (BC)
- Peromyscus maniculatus prevostensis* Osgood  
 Syn.: *Peromyscus sitkensis prevostensis* of Spencer (1966)  
 UNIRAMIA  
 SIPHUNCULATA  
*Hoplopleura hesperomydis* (BC)
- Peromyscus sitkensis* Merriam                      Sitka mouse  
 UNIRAMIA  
 SIPHONAPTERA  
*Malaraeus telchinus* (Alta, BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Peromyscus* spp.  
 CHELICERATA  
 ACARI  
*Androlaelaps fahrenheitzi* (Ont)

*Dermacentor variabilis* (NS)

*Eulaelaps stabularis* (Ont)

*Ixodes angustus* (Ont)

*I. californicus* (BC)

*I. ochotonae* (BC)

*I. pacificus* (BC)

*Myobia* spp. (BC)

#### UNIRAMIA

##### SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Atyphloceras m. multidentatus* (BC)

*Callistopsyllus terinus campestris* (Alta)

*C. t. terinus* (BC)

*Catallagia charlottensis* (BC)

*C. dacenkoi fulleri* (Alta, BC, Man, YT)

*C. decipiens* (Alta, BC, Man, Sask, YT)

*C. sculleni chamberlini* (BC)

*C. s. sculleni* (BC)

*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)

*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

*Dasypsyllus gallinulae perpinnatus* (BC)

*Delotelus hollandi* (Alta, BC)

*Doratopsylla blarinae* (NB, NS, Ont, Que)

*Epidedia scapani* (BC)

*E. stewarti* (BC)

*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Monopsyllus wagneri systaltus* (Alta, Man, Ont, Sask)

*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Peromyscopsylla catatina* (Man, Nfld, NS, Ont)

*Peromyscus* spp.

#### CHELICERATA

##### ACARI

*Androlaelaps fahrenheitsi* (Ont)

*Dermacentor variabilis* (NS)

*Eulaelaps stabularis* (Ont)

*Ixodes angustus* (Ont)

*I. californicus* (BC)

*I. ochotonae* (BC)

*I. pacificus* (BC)

*Myobia* spp. (BC)

#### UNIRAMIA

##### SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Atyphloceras m. multidentatus* (BC)

*Callistopsyllus terinus campestris* (Alta)

*C. t. terinus* (BC)

*Catallagia charlottensis* (BC)

*C. dacenkoi fulleri* (Alta, BC, Man, YT)

*C. decipiens* (Alta, BC, Man, Sask, YT)

*C. sculleni chamberlini* (BC)

*C. s. sculleni* (BC)

*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)

*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

*Dasypsyllus gallinulae perpinnatus* (BC)

*Delotelus hollandi* (Alta, BC)

*Doratopsylla blarinae* (NB, NS, Ont, Que)

*Epidedia scapani* (BC)

*E. stewarti* (BC)

*E. w. wernmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Hystrichopsylla d. dippiei* (BC)

*H. d. truncata* (BC)

*H. o. occidentalis* (Alta, BC)

*Malaraeus abantis* (Alta, BC, YT)

*M. euphorbi* (Alta, BC, NWT, Sask)

*M. telchinus* (Alta, BC)

*Megabothris abantis* (Alta, BC, YT)

*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)

*M. a. megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*M. groenlandicus* (Man, Nfld, NWT, Que, YT)

*M. lucifer* (Alta, BC, Man, Sask)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megarhthroglossus p. procus* (BC)

*Monopsyllus ciliatus protinus* (BC)

*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*M. wagneri ophidius* (BC)

*M. w. systaltus* (Alta, Man, Ont, Sask)

*M. w. wagneri* (Alta, BC)

*Opisodasys k. keeni* (Alta, BC)

*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*O. sexdentatus agilis* (Alta, BC, YT)

*Oropsylla rupestris* (Alta, Man, Sask, YT)

*Peromyscopsylla hesperomys adelpha* (Alta, Sask)

*P. h. hesperomys* (NS, Ont, Que)

*P. h. pacifica* (BC)

*P. selenis* (Alta, BC, Man, NWT, Sask, YT)

*Rhadinopsylla difficilis* (BC)

*R. sectilis goodi* (BC)

*R. s. sectilis* (BC)

*Thrassis acamantis* (Alta, BC)

*Trichopsylla wagneri systalta* (Alta)

#### SIPHUNCULATA

*Hoplopleura hesperomydis* (BC)

*Phenacomys intermedius* Merriam Heather vole

#### CHELICERATA

##### ACARI

*Listrophorus phenacomys* (Man, NWT)

#### UNIRAMIA

##### SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Catallagia decipiens* (Alta, BC, Man, Sask, YT)

*Hystrichopsylla o. occidentalis* (BC)

*Malaraeus telchinus* (Alta, BC)

*Megabothris abantis* (Alta, BC, YT)

*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask, YT)



- Rhadinopsylla fraterna* (Alta, BC, Sask)
- Phenacomys intermedius celatus* Merriam  
Syn.: *Phenacomys ungava* Merriam  
*Phenacomys ungava ungava* Merriam
- UNIRAMIA  
SIPHONAPTERA  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris asio* (Nfld)  
*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
- Phenacomys intermedius intermedius* Merriam
- UNIRAMIA  
SIPHONAPTERA  
*Megabothris abantis* (Alta, BC)
- Phenacomys* spp.
- CHELICERATA  
ACARI  
*Listrophorus phenacomys* (Man, NWT)
- UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. a. megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Rhadinopsylla difficilis* (BC)
- Rattus norvegicus* (Berkenhout) Norway rat  
Syn.: *Rattus rattus norvegicus* of Spencer (1939)
- CHELICERATA  
ACARI  
*Androlaelaps fahrenheitsi* (Ont)  
*Echinolaelaps echidninus* (Que)  
*Laelaps* spp. (Que)  
*Ornithonyssus bacoti* (BC)  
*Radfordia* spp. (Que)
- UNIRAMIA  
DIPTERA  
*Cuterebra* spp. (Sask)
- SIPHONAPTERA  
*Atyploceras m. multidentatus* (BC)  
*Catallagia charlottensis* (BC)  
*Ctenocephalides canis* (BC)  
*C. felis* (BC)  
*C. f. felis* (BC)  
*Ctenophthalmus p. pseudagyrtes* (NB, Que)  
*Epitedia scapani* (BC)  
*Hystrihopsylla o. occidentalis* (BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. quirini* (Que)  
*Megarhthroglossus p. procus* (BC)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Nosopsyllus fasciatus* (BC, Man, Nfld, NS, Ont, Que)
- Oropsylla rupestris* (Alta, Man, Sask, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask)  
*Rhadinopsylla sectilis goodi* (BC)  
Siphonaptera gen. spp. (BC)  
*Xenopsylla cheopis* (BC, NB, NS, Ont, Que)
- SIPHUNCULATA  
*Haematopinus spinulosus* (Que)  
*Hoplopleura acanthopus* (BC)  
*H. oenomydis* (BC)  
*Polyplax spinulosa* (BC, Que)
- Rattus rattus* (L.) Black rat
- CHELICERATA  
ACARI  
*Ornithonyssus bacoti* (BC)
- UNIRAMIA  
SIPHONAPTERA  
*Hystrihopsylla o. occidentalis* (BC)
- Rattus rattus alexandrinus* (Desmarest)
- UNIRAMIA  
SIPHONAPTERA  
*Nosopsyllus fasciatus* (BC)  
Siphonaptera gen. spp. (BC)  
*Xenopsylla cheopis* (BC)
- Rattus rattus rattus* (L.)
- UNIRAMIA  
SIPHONAPTERA  
*Nosopsyllus fasciatus* (BC)  
*Xenopsylla cheopis* (BC)
- SIPHUNCULATA  
*Polyplax spinulosa* (BC)
- Rattus* spp.
- UNIRAMIA  
DIPTERA  
*Cuterebra* sp. (Sask)
- SIPHONAPTERA  
*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*Nosopsyllus fasciatus* (BC, Man, Nfld, NS, Ont, Que, Sask)  
*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
- SIPHUNCULATA  
*Polyplax spinulosa* (BC)
- Synaptomys borealis* (Richardson) Northern bog lemming
- UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus athabascaae* (Alta, BC, Man, Nfld, NWT, Que, Sask)  
*A. dissimilis* (Alta, BC, NWT, YT)  
*Ctenophthalmus p. pseudagyrtes* (NB)  
*Epitedia w. wenmanni* (NB)  
*Megabothris asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. calcarifer gregsoni* (NWT, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Monopsyllus w. wagneri* (Alta, BC)

*Synaptomys borealis borealis* (Richardson)

UNIRAMIA

SIPHONAPTERA

*Peromyscopsylla selenis* (Alta, BC, Man,  
NWT, Sask)

*Synaptomys borealis chapmani* Allen

CHELICERATA

ACARI

*Androlaelaps fahrenheiti* (NB)

*Euryparasitus* spp. (NB)

*Glycyphagus hypudaei* (NB)

*Ixodes angustus* (NB)

*Laelaps alaskensis* (NB)

*Listrophorus synaptomys* (NB)

*Miyatrombicula esoensis* (NB)

*Orycteroxenus soricis* (NB)

*Pygmephorus horridus* (NB)

*Radfordia hylandi* (NB)

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus pseudagyrtes* (NB)

*Eptedia w. wenmanni* (NB)

*Megabothris quirini* (NB)

SIPHUNCULATA

*Hoplopleura acanthopus* (Alta, BC)

*Synaptomys borealis medioximus* Bangs

UNIRAMIA

SIPHONAPTERA

*Megabothris a. asio* (Nfld)

*Synaptomys borealis truei* Merriam

Syn.: *Synaptomys borealis wrangeli* Merriam

UNIRAMIA

SIPHONAPTERA

*Megabothris abantis* (Alta, BC)

*Synaptomys cooperi* Baird

Southern bog  
lemming

CHELICERATA

ACARI

*Androlaelaps fahrenheiti* (NB)

*Bakerdania* spp. (NB)

*Dermacentor variabilis* (NS)

*Echinonyssus isabellinus* (NB)

*Eulaelaps stabularis* (NB)

*Euryparasitus* spp. (NB)

*Glycyphagus hypudaei* (NB)

*Haemogamasus ambulans* (NB)

*H. liponyssoides* (NB)

*Ixodes angustus* (NB)

*I. muris* (NS)

*Laelaps alaskensis* (NB)

*L. kochi* (NB)

*Listrophorus mexicanus* (NB)

*L. synaptomys* (NB)

*Megabothris quirini* (NB)

*Miyatrombicula esoensis* (NB)

*Neotrombicula harperi* (NB)

*Pygmephorus horridus* (NB)

*Radfordia hylandi* (NB)

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (NB)

*Eptedia w. wenmanni* (NB)

*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI,  
Que)

*M. quirini* (NB)

SIPHUNCULATA

*Hoplopleura acanthopus* (NB)

*Synaptomys cooperi cooperi* Baird

CHELICERATA

ACARI

*Ixodes muris* (NS)

*Synaptomys* spp.

UNIRAMIA

SIPHONAPTERA

*Amphipsylla sibirica pollionis* (Alta, BC,  
Nfld, YT)

*Catallagia charlottensis* (BC)

*Megabothris abantis* (Alta, BC, YT)

*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)

*M. a. megacolpus* (Alta, BC, Man, NWT,  
Ont, Que, Sask, YT)

*M. groenlandicus* (Man, Nfld, NWT, Que,  
YT)

*M. lucifer* (Alta, BC, Man, Sask)

*Monopsyllus w. wagneri* (Alta, BC)

*Peromyscopsylla catatina* (NB)

*P. selenis* (Alta, BC, Man, NWT, Sask, YT)

*Thrassis acamantis* (Alta, BC)

## MURIDAE OF UNDETERMINED SPECIES

Deer mouse

UNIRAMIA

SIPHONAPTERA

*Malariaeus euphorbi* (Alta, BC, NWT, Sask)

Field mouse

CHELICERATA

ACARI

*Dermacentor andersoni* (BC)

*Psorergates* spp. (Ont)

UNIRAMIA

DIPTERA

*Cuterebra grisea* (Sask)

SIPHONAPTERA

*Monopsyllus ciliatus protimus* (BC)

House mouse

CHELICERATA

ACARI

*Myobia musculi* (Ont)

*Psorergates* sp. (Ont)

UNIRAMIA

DIPTERA

*Cuterebra grisea* (BC)

*Cuterebra* sp. (Man)

SIPHONAPTERA

*Monopsyllus thambus* (Nfld)

*M. wagneri systaltus* (Alta, Man, Ont, Sask)

- Kangaroo mouse  
UNIRAMIA  
SIPHONAPTERA  
*Ctenopsyllus selenis* (Alta)
- Lab rat  
UNIRAMIA  
DIPTERA  
*Wohlfahrtia meigenii* (Alta)
- Lemming  
UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus garei* (Alta, BC, Man, NWT, Que, YT)  
  
*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)  
*M. groenlandicus* (Man)
- Meadow vole  
UNIRAMIA  
SIPHONAPTERA  
*Megabothris a. asio* (NB, Nfld, NS, Ont, PEI, Que)
- Mice  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta, BC, Ont)  
*Ixodes angustus* (BC)  
*I. cookei* (BC)  
*I. pacificus* (BC)  
*Psorergates simplex* (unspecified)  
UNIRAMIA  
DIPTERA  
*Cuterebra grisea* (Alta)  
SIPHONAPTERA  
*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Ctenophthalmus p. pseudagyrtis* (NB, NS, Ont)  
*Malaraeus telchinus* (Alta, BC)  
*Megabothris abantis* (Alta, BC)  
*M. groenlandicus* (Man)  
*Monopsyllus thambus* (Alta, BC, Nfld, NWT, Que, YT)  
*M. w. wagneri* (Alta, BC)  
*Nosopsyllus fasciatus* (BC, Ont, Que, Sask)  
*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
- Packrat  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC)  
*Ixodes cookei* (BC)
- Pallid vole  
UNIRAMIA  
SIPHONAPTERA  
*Amphipsylla washingtona* (Alta)
- Pocket gopher  
UNIRAMIA
- SIPHONAPTERA  
*Foxella ignota albertensis* (Alta, Sask)  
*F. i. ignota* (Man)  
*F. i. recula* (BC)
- Pocket mouse  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC)
- Red-backed mouse  
UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)
- Red-backed vole  
UNIRAMIA  
SIPHONAPTERA  
*Malaraeus telchinus* (Alta, BC)
- Vole  
CHELICERATA  
ACARI  
*Ixodes angustus* (BC)  
UNIRAMIA  
DIPTERA  
*Cuterebra* sp. (unspecified)  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)
- White mouse  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC)
- Wood rat  
UNIRAMIA  
SIPHONAPTERA  
*Orchopeas sexdenatus agilis* (Alta, BC, YT)  
  
Family SCIURIDAE
- Cynomys ludovicianus* Baird                      Black-tailed prairie dog  
UNIRAMIA  
SIPHONAPTERA  
*Opisocrostis labis* (Alta, Sask)  
*Thrassis b. bacchi* (Alta, Man, Sask)
- Cynomys ludovicianus ludovicianus* (Ord)  
UNIRAMIA  
SIPHONAPTERA  
*Opisocrostis labis* (Alta, Sask)  
*O. t. tuberculatus* (Alta, BC, Sask)  
*Oropsylla rupestris* (Alta, Man, Sask)  
*Thrassis b. bacchi* (Alta, Man, Sask)  
SIPHUNCULATA  
*Neohaematopinus marmotae* (Sask)
- Eutamias amoenus* Allen                      Yellow-pine chipmunk  
UNIRAMIA  
SIPHONAPTERA



*Monopsyllus ciliatus protinus* (BC)  
*M. eumolpi* (Alta, BC, Man, NWT, Sask,  
Ont, YT)  
*Orchopeas caedens durus* (BC)

*Eutamias amoenus affinis* (Allen)

UNIRAMIA

SIPHONAPTERA

*Catallagia decipiens* (Alta, BC, Man, Sask,  
YT)

*Hystrihopsylla d. dippeii* (BC)

*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)

*M. e. eumolpi* (Alta, BC, Man, NWT, Ont,  
Sask, YT)

SIPHUNCULATA

*Hoplopleura arboricola* (BC)

*Neohaematopinus sciuropteri* (BC)

*Eutamias amoenus felix* (Rhoads)

UNIRAMIA

SIPHONAPTERA

*Monopsyllus ciliatus protinus* (BC)

*Eutamias amoenus ludibondus* Hollister

UNIRAMIA

SIPHONAPTERA

*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)

*Eutamias amoenus luteiventris* (Allen)

UNIRAMIA

SIPHONAPTERA

*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)

*M. e. eumolpi* (Alta, BC, Man, NWT, Ont,  
Sask, YT)

SIPHUNCULATA

*Hoplopleura arboricola* (BC)

*Eutamias minimus* (Bachman) Least chipmunk

CHELICERATA

ACARI

*Haemogamasus ambulans* (Ont)

UNIRAMIA

SIPHONAPTERA

*Amalaraeus dissimilis* (Alta, BC, NWT, YT)

*Ctenophthalmus p. pseudagyrtis* (Alta, BC,  
Man, NB, NS, Ont, PEI, Que, Sask)

*Megabothris acerbus* (Man, Ont)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS,  
NWT, Ont, Que, Sask, YT)

*Monopsyllus e. eumolpi* (Alta, BC, Man,  
NWT, Ont, Sask, YT)

*Orchopeas sexdentatus agilis* (Alta, BC, YT)

*Eutamias minimus borealis* (Allen)

Syn.: *Eutamias borealis* of Holland (1950)

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtis* (Alta, BC,  
Man, NB, NS, Ont, PEI, Que, Sask)

*Megabothris asio megalcolpus* (Man)

*M. quirini* (Alta, BC, Man, NWT, Ont)

*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)

*M. e. eumolpi* (Alta, BC, Man, NWT, Ont,

Sask, YT)

*M. tolli* (YT)

*M. vison* (Alta, BC, Man, Nfld, NS, NWT,  
Ont, Que, Sask, YT)

*Opisocrostis bruneri* (unspecified)

*Eutamias minimus minimus* (Bachman)

UNIRAMIA

SIPHONAPTERA

*Monopsyllus e. eumolpi* (Alta, BC, Man,  
NWT, Ont, Sask, YT)

*Eutamias minimus selkirkii* Cowan

UNIRAMIA

SIPHONAPTERA

*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)

*Eutamias townsendii* (Bachman)

Townsend's  
chipmunk

UNIRAMIA

SIPHONAPTERA

*Monopsyllus ciliatus protinus* (BC)

*Oropsylla idahoensis* (Alta, BC, YT)

*Eutamias townsendii cooperi* (Baird)

UNIRAMIA

SIPHONAPTERA

*Monopsyllus ciliatus protinus* (BC)

*Eutamias* spp.

CHELICERATA

ACARI

*Ixodes pacificus* (BC)

UNIRAMIA

SIPHONAPTERA

*Catallagia charlottensis* (BC)

*C. decipiens* (Alta, BC, Man, Sask, YT)

*Ceratophyllus diffinis* (BC)

*Ctenophthalmus p. pseudagyrtis* (Alta, BC,  
Man, NB, NS, Ont, PEI, Que, Sask)

*Eptedia w. wemmanni* (Alta, BC, Man, NB,  
NWT, Ont, Sask)

*Megabothris asinus* (Alta, BC)

*M. asio megalcolpus* (Alta, BC, Man, NWT,  
Ont, Que, Sask, YT)

*M. lucifer* (Alta, BC, Man, Sask)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS,  
NWT, Ont, Que, Sask, YT)

*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)

*M. e. eumolpi* (Alta, BC, Man, NWT, Ont,  
Sask, YT)

*M. vison* (Alta)

*M. w. wagneri* (Alta, BC)

*Opisodasys k. keeni* (Alta, BC)

*Orchopeas c. caedens* (Alta, BC, Man, Que,  
YT)

*O. c. durus* (BC, Nfld, NWT)

*Oropsylla idahoensis* (Alta, BC, YT)

*Thrassis acamantis* (Alta)

*T. petiolatus* (Alta, BC)

*Trichopsylla e. eumolpi* (Alta)

*T. vison* (Alta)

- Glaucomys sabrinus* (Shaw) Northern flying squirrel
- CHELICERATA  
ACARI  
*Haemogamasus* sp. (NS)  
*Ixodes marxi* (NS)  
*Laelaps kochi* (Ont)
- UNIRAMIA  
SIPHONAPTERA  
*Conorhinopsylla stanfordi* (Ont)  
*Eptedia faceta* (Ont, Que)  
*E. w. wenmanni* (NB)  
*Megarthroglossus divisus exsecatus* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)  
*O. vesperalis* (BC)  
*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)  
*O. c. durus* (Alta, BC, NB, Nfld, NS, NWT, Ont, Que, Sask)  
*Tarsopsylla octodecimentata coloradensis* (Alta, BC, Man, NWT, Ont, Sask, YT)
- SIPHUNCULATA  
*Neohaematopinus sciuropteri* (Alta)
- Glaucomys sabrinus alpinus* (Richardson)
- UNIRAMIA  
SIPHONAPTERA  
*Opisodasys pseudarctomys* (BC)  
*O. vesperalis* (BC)  
*Tarsopsylla octodecimentata coloradensis* (BC)
- SIPHUNCULATA  
*Neohaematopinus sciuropteri* (BC)
- Glaucomys sabrinus canescens* Howell
- UNIRAMIA  
SIPHONAPTERA  
*Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)
- Glaucomys sabrinus columbiensis* Howell
- UNIRAMIA  
SIPHONAPTERA  
*Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)  
*O. vesperalis* (BC)
- SIPHUNCULATA  
*Hoplopleura trispinosa* (BC)  
*Neohaematopinus sciuropteri* (BC)
- Glaucomys sabrinus fuliginosus* (Rhoads)
- UNIRAMIA  
SIPHONAPTERA  
*Megarthroglossus divisus exsecatus* (BC)  
*Opisodasys vesperalis* (BC)
- Glaucomys sabrinus gouldi* Anderson
- CHELICERATA  
ACARI
- Ixodes marxi* (NS)
- Glaucomys sabrinus macrotis* (Mearns)
- UNIRAMIA  
SIPHONAPTERA  
*Eptedia w. wenmanni* (NB)  
*Opisodasys pseudarctomys* (Alta, NB, Ont)  
*Orchopeas leucopus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
- Glaucomys sabrinus makkovikensis* (Sornborger)
- UNIRAMIA  
SIPHONAPTERA  
*Opisodasys pseudarctomys* (Nfld)
- Glaucomys sabrinus oregonensis* (Bachman)
- CHELICERATA  
ACARI  
Acari gen. spp. (BC)  
*Ixodes pacificus* (BC)
- UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus ciliatus protinus* (BC)  
*Opisodasys vesperalis* (BC)  
*Orchopeas nepos* (BC)
- SIPHUNCULATA  
*Hoplopleura trispinosa* (Alta, BC)  
*Microphthirus uncinatus* (Alta, BC)  
*Neohaematopinus sciuropteri* (Alta, BC)
- Glaucomys volans* (L.) Southern flying squirrel
- UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus gallinae* (Man)  
*Canorhinopsylla stanfordi* (Ont)  
*Ctenophthalmus p. pseudagyrtis* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)  
*Eptedia faceta* (Ont, Que)  
*Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)  
*Orchopeas h. howardi* (Alta, Ont)  
*O. leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
- Glaucomys volans volans* (L.)
- UNIRAMIA  
SIPHONAPTERA  
*Cornorhinopsylla stanfordi* (Ont)  
*Eptedia faceta* (Ont, Que)  
*Orchopeas h. howardii* (Alta, Ont)  
*O. leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
- Glaucomys* spp.  
Syn.: *Sciuropterus* spp.
- UNIRAMIA  
SIPHONAPTERA  
*Eptedia faceta* (Ont, Que)  
*Megarthroglossus p. procius* (BC)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

- Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)  
*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)  
*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*O. leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
- Marmota caligata** (Eschscholtz) Hoary marmot  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta, BC)  
UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus ciliatus protinus* (BC)  
*Oropsylla arctomys* (Alta, BC, Man, NB, Ont, Que, Sask)  
*Thrassis s. spenceri* (Alta, BC)
- Marmota caligata cascadenis** Howell  
UNIRAMIA  
SIPHONAPTERA  
*Thrassis s. spenceri* (Alta, BC)
- Marmota caligata okanagana** (King)  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla arctomys* (BC)  
*Thrassis s. spenceri* (Alta, BC)  
SIPHUNCULATA  
*Neohaematopinus marmotae* (BC)
- Marmota flaviventris** (Audubon and Bachman) Yellow-bellied marmot  
UNIRAMIA  
SIPHONAPTERA  
*Thrassis acamantis* (Alta, BC)
- Marmota flaviventris avara** (Bangs)  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC)  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla acamantis* (BC)  
*O. idahoensis* (Alta, BC, YT)  
*Thrassis acamantis* (Alta, BC)  
SIPHUNCULATA  
*Neohaematopinus marmotae* (BC)
- Marmota monax** (L.) Woodchuck  
CHELICERATA  
ACARI  
*Androlaelaps* sp. (NS)  
*Dermacentor andersoni* (Alta, BC, Ont)  
*Haemolaelaps glasgowi* (Ont)  
*Ixodes cookei* (Ont)  
*I. texanus* (Ont)  
UNIRAMIA  
SIPHONAPTERA  
*Opiscrostis bruneri* (Alta, Man, Sask)  
*Oropsylla arctomys* (Alta, BC, Man, NB, NS, NWT, Ont, Que, Sask)
- Thrassis s. spenceri* (Alta, BC)  
SIPHUNCULATA  
*Enderleinellus marmotae* (Ont)
- Marmota monax canadensis** (Erxleben)  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
- Marmota monax petrensis** Howell  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla arctomys* (BC)  
*Thrassis s. spenceri* (Alta, BC)  
SIPHUNCULATA  
*Neohaematopinus marmotae* (BC)
- Marmota monax rufescens** Howell  
CHELICERATA  
ACARI  
*Ixodes cookei* (Ont, Que)  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
- Marmota vancouverensis** Swarth Vancouver marmot  
UNIRAMIA  
SIPHONAPTERA  
*Thrassis acamantis* (BC)  
*T. s. spenceri* (BC)
- Marmota** spp.  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta)  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)  
*O. idahoensis* (Alta)  
*Thrassis acamantis* (Alta, BC)  
*T. s. spenceri* (Alta, BC)
- Sciurus carolinensis** Gmelin Gray squirrel  
Syn.: *Sciurus carolinensis leucotis* of Judd (1954)  
UNIRAMIA  
SIPHONAPTERA  
*Conorhinopsylla stanfordi* (Ont)  
*Megabothris acerbus* (Man, Ont)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*O. h. howardi* (Alta, Ont)  
*O. nepos* (BC)  
SIPHUNCULATA  
*Neohaematopinus sciurinus* (Ont)
- Sciurus carolinensis pennsylvanicus** Ord  
UNIRAMIA



- SIPHUNCULATA  
*Neohaematopinus sciurinus* (BC)
- Sciurus niger* L. Fox squirrel
- UNIRAMIA  
SIPHONAPTERA  
*Orchopeas h. howardi* (Alta, Ont)
- Sciurus* spp.  
UNIRAMIA  
SIPHONAPTERA  
*Catallagia charlottensis* (BC)  
*Megarhthroglossus divisus exsecatus* (BC)  
*Orchopeas h. howardi* (Alta, Ont)  
*O. sexdentatus agilis* (Alta, BC, YT)
- Spermophilus columbianus* (Ord) Columbian ground squirrel
- CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta, BC)  
*Ixodes sculptus* (Alta)
- UNIRAMIA  
SIPHONAPTERA  
*Callistopsyllus t. terinus* (BC)  
*Catallagia charlottensis* (BC)  
*C. decipiens* (Alta, BC, Man, Sask, YT)  
*Hystrihopsylla dippiei spinata* (BC)  
*H. d. truncata* (BC)  
*Malaraeus telchinus* (BC)  
*Monopsyllus e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Opisocrostis bruneri* (Alta)  
*O. t. tuberculatus* (Alta, BC, Sask, YT)  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)  
*O. idahoensis* (Alta, BC, YT)  
*O. petiolatus* (Alta)  
*O. t. tuberculata* (Alta)  
*Tamiophila grandis* (Alta)  
*Thrassis petiolatus* (Alta, BC)
- SIPHUNCULATA  
*Enderleinellus suturalis* (Alta)  
*Neohaematopinus laeviusculus* (Alta)
- Spermophilus columbianus columbianus* (Ord)  
Syn.: *Citellus columbianus columbianus* of Holland (1944)
- CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC)
- UNIRAMIA  
SIPHONAPTERA  
*Foxella ignota recula* (BC)  
*Megabothris abantis* (Alta, BC)  
*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Opisocrostis t. tuberculatus* (BC)  
*Oropsylla idahoensis* (Alta, BC)  
*O. petiolatus* (BC)
- O. tuberculatus* (Alta, BC)  
*Rhadinopsylla fraternata* (BC)  
*R. s. sectilis* (BC)  
*Thrassis acamantis* (BC)  
*T. petiolatus* (BC)
- SIPHUNCULATA  
*Neohaematopinus laeviusculus* (BC)
- Spermophilus franklinii* (Sabine) Franklin's ground squirrel  
Syn.: *Citellus franklinii* (Sabine)
- CHELICERATA  
ACARI  
*Dermacentor variabilis* (Man)  
*Ixodes sculptus* (Alta)
- UNIRAMIA  
SIPHONAPTERA  
*Hystrihopsylla d. dippiei* (Alta, Man, Ont)  
*Megabothris atrox* (Alta, Man, Ont)  
*M. quirini* (Alta, BC, NWT, Ont)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Opisocrostis bruneri* (Alta, Man, Sask)  
*O. labis* (Alta, Sask)  
*O. t. tuberculatus* (Alta, Sask)  
*Orchopeas c. caedens* (Alta, BC, NWT, Sask, YT)  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)  
*O. bacchi* (unspecified)  
*O. rupestris* (Alta, Man, Sask)  
*Thrassis b. bacchi* (Alta, Man, Sask)
- SIPHUNCULATA  
*Enderleinellus suturalis* (Alta)
- Spermophilus lateralis* (Say) Golden-mantled ground squirrel
- UNIRAMIA  
SIPHONAPTERA  
*Amalaraeus dissimilis* (Alta, BC, NWT, YT)  
*Oropsylla idahoensis* (Alta, YT)  
*Rhadinopsylla difficilis* (BC)  
*Thrassis petiolatus* (Alta, BC)
- Spermophilus lateralis tescorum* (Hollister)
- UNIRAMIA  
SIPHONAPTERA  
*Oropsylla idahoensis* (Alta)
- Spermophilus parryii* (Richardson) Arctic ground squirrel  
Syn.: *Spermophilus undulatus* of Spencer (1966)  
*S. u. parryii* of Spencer (1966)
- UNIRAMIA  
SIPHONAPTERA  
*Megabothris groenlandicus* (Nfld, NWT, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)  
*Opisocrostis t. tuberculatus* (Alta, BC, Sask, YT)  
*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)

- Oropsylla alaskensis* (NWT, YT)  
*O. idahoensis* (Alta, BC, YT)  
*O. rupestris* (Alta, Man, Sask, YT)  
*Rhadinopsylla linta* (BC, NWT, YT)  
SIPHUNCULATA  
*Neohaematopinus laeviusculus* (NWT)
- Spermophilus parryii parryii* (Richardson)  
UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus lunatus tundrensis* (NWT, Que)  
*Oropsylla alaskensis* (NWT)
- Spermophilus parryii plesius* Osgood  
Syn.: *Spermophilus undulatus plesius*  
UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Oropsylla idahoensis* (Alta, BC, YT)
- Spermophilus richardsonii* (Sabine) Richardson's ground squirrel  
Syn.: *Citellus richardsonii* (Sabine)  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta)  
*Haemaphysalis leporis-palustris* (Alta)  
*Hirstionyssus occidentalis* (Alta)  
*Ixodes kingi* (Alta)  
*I. sculptus* (Alta)  
*Liponyssus montanus* (Man)  
*L. occidentalis* (Man)  
*Pneumonyssus* spp. (Alta)  
UNIRAMIA  
DIPTERA  
*Cuterebra grisea* (Sask)  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Epitedia inopina* (Alta)  
*E. w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystrihopsylla d. dippiei* (Alta, Man, Ont, Sask)  
*Nearctopsylla brooksi* (Alta, BC)  
*Neopsylla inopina* (Alta, BC, Sask)  
*Opisocrostis bruneri* (Alta, Man, Sask)  
*O. labis* (Alta, Sask)  
*O. t. tuberculatus* (Alta, Sask, YT)  
*Oropsylla arctomys* (Alta)  
*O. idahoensis* (Alta)  
*O. rupestris* (Alta, Man, Sask, YT)  
*Rhadinopsylla fraterna* (Alta, BC, Sask)  
*Tamioiphila grandis* (Alta)  
*Thrassis b. bacchi* (Alta, Man, Sask)  
*T. petiolatus* (Alta, BC)  
SIPHUNCULATA  
*Enderleinellus suturalis* (Alta)  
*Neohaematopinus laeviusculus* (Alta)
- Spermophilus richardsonii richardsonii* (Sabine)  
Syn.: *Citellus richardsonii richardsonii* (Sabine)  
UNIRAMIA  
SIPHONAPTERA  
*Ctenophthalmus p. pseudagyrtes* (Alta, Man, Ont, Sask)  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, NWT, Ont, Sask)  
*Hystrihopsylla d. dippiei* (Alta, Sask)  
*Megabothris asio megalcolpus* (Sask)  
*M. lucifer* (Alta, BC, Sask)  
*Neopsylla inopina* (Alta, Sask)  
*Opisocrostis bruneri* (Alta, Man, Sask)  
*O. labis* (Alta, Sask)  
*O. t. tuberculatus* (Alta, BC, Sask, YT)  
*Oropsylla idahoensis* (Alta, BC)  
*O. rupestris* (Alta, Man, Sask, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask)  
*Rhadinopsylla fraterna* (Alta, BC, Sask)  
*Thrassis b. bacchi* (Alta, Man, Sask, unspecified)
- Spermophilus saturatus* (Rhoads) Cascade golden-mantled ground squirrel  
UNIRAMIA  
SIPHONAPTERA  
*Oropsylla idahoensis* (Alta, BC, YT)
- Spermophilus tridecemlineatus* (Mitchell) Thirteen-lined ground squirrel  
Syn.: *Citellus tridecemlineatus* (Mitchell)  
CHELICERATA  
ACARI  
*Dermacentor variabilis* (Man)  
*Liponyssus montanus* (Man)  
*L. occidentalis* (Man)  
UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus bruneri* (Man)  
*Opisocrostis bruneri* (Alta, Man, Sask)  
*O. t. tuberculatus* (Alta, BC, Sask)  
*Oropsylla idahoensis* (Alta, BC)  
*Thrassis b. bacchi* (Alta, Man, Sask)
- Spermophilus tridecemlineatus tridecemlineatus* (Mitchell)  
Syn.: *Citellus t. tridecemlineatus* (Mitchell)  
UNIRAMIA  
SIPHONAPTERA  
*Opisocrostis bruneri* (Alta, Man, Sask)  
*O. t. tuberculatus* (Alta, Sask)  
*Thrassis b. bacchi* (Alta, Sask)
- Spermophilus* spp.  
Syn.: *Citellus* spp.  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC, Man)  
UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

- Oropsylla alaskensis* (NWT, YT)  
*O. idahoensis* (Alta, BC, YT)  
*O. rupestris* (Alta, Sask)  
*Rhadinopsylla linta* (BC, NWT, YT)  
*Thrassis petiolatus* (Alta, BC)  
SIPHUNCULATA  
*Linognathoides montanus* (Canada)
- Tamiasciurus douglasii* (Bachman) Douglas' squirrel  
CHELICERATA  
ACARI  
*Ixodes spinapalpus* (BC)  
UNIRAMIA  
SIPHONAPTERA  
*Hystriochopsylla o. occidentalis* (BC)  
*Megarhthroglossus d. divisus* (BC)  
*M. p. procus* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. wagneri ophidius* (BC)  
*Opisodasys vesperalis* (BC)  
*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*O. nepos* (BC)
- Tamiasciurus douglasii mollipilosus* (Audubon and Bachman)  
Syn.: *Tamiasciurus douglasii cascadiensis* (Allen)  
CHELICERATA  
ACARI  
*Ixodes angustus* (BC)  
UNIRAMIA  
SIPHONAPTERA  
*Dasypsyllus gallinulae perpinnatus* (BC)  
*Megarhthroglossus p. procus* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*Nosopsyllus fasciatus* (BC, Ont, Que, Sask)  
*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*O. nepos* (BC)  
*Rhadinopsylla sectilis goodii* (BC)  
SIPHUNCULATA  
*Hoplopleura sciuricola* (BC)
- Tamiasciurus hudsonicus* (Erxleben) Red squirrel  
Syn.: *Sciurus hudsonicus* Erxleben  
CHELICERATA  
ACARI  
*Dermacarus hypudaei septentrionalis* (Que)  
*D. newyorkensis* (Que)  
*D. sciurinus* (Que)  
*Dermacentor variabilis* (NS)  
*Gliricoptes* spp. (Que)  
Glycephagidae gen. spp. (Ont)  
*Haemaphysalis leporis-palustris* (NS)  
*Haemolaelaps glasgowi* (Ont)  
*Ixodes angustus* (Alta)  
*I. marxi* (NS, Ont, Que)  
*I. muris* (NS)  
Labidophorids (Ont)  
*Neotrombicula microti* (NS)  
*Trombicula* spp. (Que)  
Trombiculidae gen. spp. (Ont)  
*Zumptiella bakeri* (Que)
- UNIRAMIA  
SIPHONAPTERA  
*Catallagia charlottensis* (BC)  
*C. decipiens* (Alta, BC, Man, Sask, YT)  
*Ceratophyllus lunatus tundrensis* (Man, Nfld, NWT, Que, YT)  
*C. niger* (BC)  
*Ctenophthalmus p. pseudagyrtus* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)  
*Epidedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Hystriochopsylla dippiei* ssp. (NB, Ont)  
*H. d. truncata* (BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megarhthroglossus d. divisus* (Alta)  
*M. d. exsecatus* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. eumolpi* (Alta, BC, Ont, Sask)  
*M. e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*M. vison* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*M. w. wagneri* (Alta, BC)  
*Opisocrostis bruneri* (Man)  
*O. t. tuberculatus* (Alta, BC, Sask, YT)  
*Opisodasys pseudarctomys* (Alta, BC, Man, NS, Ont, Que)  
*Orchopeas caedens* (NWT, Ont)  
*O. c. caedens* (Alta, BC, Man, NWT, Que, Sask, YT)  
*O. c. durus* (BC, Nfld, NS, NWT)  
*O. h. howardi* (Alta, Ont)  
*O. leucopus* (Que)  
*O. sexdentatus agilis* (Alta, BC, YT)  
*Oropsylla arctomys* (Alta, BC, Man, NB, NWT, Ont, Que, Sask)  
*Peromyscopsylla catatina* (Man, Nfld, NS, Ont)  
*P. selenis* (Alta, BC, Man, NWT, Sask, YT)  
*Rhadinopsylla arborea* (Alta, BC)  
*R. fraterna* (Alta, BC, Sask)  
*R. linta* (BC, NWT, YT)  
*R. s. sectilis* (BC)  
*Stenoponia americana* (NB)  
*Tarsopsylla octodecimentata coloradensis* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*Trichopsylla vison* (Alta)  
SIPHUNCULATA  
*Enderleinellus nitschi* (Ont, Que)  
*Hoplopleura hesperomydis* (Que)  
*H. sciuricola* (Alta, BC)  
*Neohaematopinus sciurinus* (Alta)  
*N. semifasciatus* (Ont)
- Tamiasciurus hudsonicus baileyi* (Allen)  
Syn.: *Sciurus richardsoni baileyi* of Brown (1944)  
UNIRAMIA  
SIPHONAPTERA



*Malareus euphorbi* (Alta, BC, NWT, Sask)  
*Megarhroglossus d. divisus* (Alta)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)  
*Rhadinopsylla arborea* (Alta, BC)

*Tamiasciurus hudsonicus columbiensis* Howell  
UNIRAMIA

SIPHONAPTERA  
*Megabothris quirini* (Alta, BC, NWT, Ont)  
*Megarhroglossus divisus exsecatus* (BC)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)  
*Orchopeas caedens durus* (BC, Nfld, NWT)  
SIPHUNCULATA  
*Neohaematopinus sciurinus* (BC)  
*Solenopotes ferrisi* (BC)

*Tamiasciurus hudsonicus gymnicus* (Bangs)

CHELICERATA

ACARI  
*Haemaphysalis leporis-palustris* (NS)

UNIRAMIA

SIPHONAPTERA  
*Ctenophthalmus p. pseudagyrtes* (NB)  
*Eptedia w. wenmanni* (NB)  
*Megabothris quirini* (NB)  
*Monopsyllus vison* (NB)  
*Nearctopsylla g. genalis* (NB)  
*Orchopeas caedens durus* (NB)  
*O. h. howardi* (Que)

*Tamiasciurus hudsonicus hudsonicus* (Erxleben)

UNIRAMIA

SIPHONAPTERA  
*Megabothris quirini* (Alta, BC, Man, NWT,  
Ont)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)  
*Opisocrostitis bruneri* (Alta, Man, Sask)  
*Orchopeas caedens durus* (Alta, BC, NB,  
Nfld, NWT, Ont, Que, Sask)  
*O. leucopus* (Man)  
*Peromyscopsylla catatina* (Ont)

*Tamiasciurus hudsonicus lanuginosus* (Bachman)

UNIRAMIA

SIPHONAPTERA  
*Monopsyllus ciliatus protinus* (BC)  
SIPHUNCULATA  
*Neohaematopinus sciurinus* (BC)

*Tamiasciurus hudsonicus laurentianus* Anderson

UNIRAMIA

SIPHONAPTERA  
*Megabothris quirini* (Que)

*Tamiasciurus hudsonicus loquax* (Bangs)

CHELICERATA

ACARI  
*Ixodes marxi* (Ont)

UNIRAMIA

SIPHONAPTERA  
*Orchopeas h. howardii* (Ont)

*Tamiasciurus hudsonicus minnesota* (Allen)

UNIRAMIA

SIPHONAPTERA

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)

*Tamiasciurus hudsonicus picatus* (Swarth)

UNIRAMIA

SIPHONAPTERA

*Ceratophyllus petrochelidoni* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT,  
Ont, Que, Sask, YT)

*Tamiasciurus hudsonicus preblei* Howell

UNIRAMIA

SIPHONAPTERA

*Ceratophyllus garei* (Alta, BC, Man, NWT,  
Que, YT)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)  
*Orchopeas c. caedens* (Alta, BC, NWT, Sask,  
YT)  
*O. c. durus* (NWT)  
*O. sexdentatus agilis* (Alta, YT)

*Tamiasciurus hudsonicus richardsoni* (Bachman)

Syn.: *Sciurus hudsonicus richardsoni* Bachman

UNIRAMIA

SIPHONAPTERA

*Megarhroglossus d. divisus* (Alta)  
*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)  
*Orchopeas sexdentatus agilis* (Alta)

*Tamiasciurus hudsonicus streatori* (Allen)

CHELICERATA

ACARI

*Ixodes hearlei* (BC)

UNIRAMIA

SIPHONAPTERA

*Atyphloceras m. multidentatus* (BC)  
*Eptedia w. wenmanni* (Alta, BC, Man, NB,  
NWT, Ont, Sask)  
*Megabothris abantis* (BC)  
*Megarhroglossus divisus exsecatus* (BC)  
*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT,  
Ont, Que, Sask, YT)  
*Opisodasys pseudarctomys* (Alta, Ont)  
*Orchopeas caedens durus* (Alta, BC, NB,  
Nfld, NWT, Ont, Que, Sask)  
*Rhadinopsylla s. sectilis* (BC)  
*Thrassis acamantis* (Alta)  
SIPHUNCULATA  
*Hoplopleura sciuricola* (BC)  
*Neohaematopinus sciurinus* (BC)

*Tamiasciurus hudsonicus ungavensis* Anderson

UNIRAMIA

SIPHONAPTERA

*Monopsyllus vison* (Alta, BC, Man, Nfld, NS,  
NWT, Ont, Que, Sask, YT)

*Orchopeas caedens durus* (Nfld, Que)

*Tamiasciurus* spp.

CHELICERATA

ACARI

*Ixodes pacificus* (BC)

UNIRAMIA

SIPHONAPTERA

*Atyphloceras m. multidentatus* (BC)

*Cororhinopsylla stanfordi* (Ont)

*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

*Eptedia w. wenmanni* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Megarhroglossus divisus exsecatus* (BC)

*Monopsyllus cileatus protinus* (BC)

*M. e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)

*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)

*O. c. durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)

*O. nepos* (BC)

*Tarsopsylla octodecimdentata coloradensis* (Alta, BC, Man, NWT, Ont, Sask, YT)

*Tamias striatus* (L.)

Eastern chipmunk

CHELICERATA

ACARI

*Dermacarus hylandi* (NB)

*Dermacentor variabilis* (Man, NS)

*Euschoengastia setosa* (Que)

*Haemaphysalis leporis-palustris* (PEI)

*Haemolaelaps glasgowi* (Ont)

*Ixodes angustus* (Ont)

*I. muris* (NS)

*Miyatrombicula esoensis* (NB)

*Myocoptes* spp. (Que)

*Neotrombicula harperi* (NB)

Sarcoptidae gen. spp. (Ont)

Trombiculidae gen. spp. (Ont)

UNIRAMIA

DIPTERA

*Cuterebra emasculator* (Ont)

*Cuterebra* sp. (Ont)

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

*Hoplopleura erratica* (Ont, Que)

*Megabothris acerbus* (Man, Ont)

*M. asio megacolpus* (Man)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Monopsyllus e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)

*M. vison* (Ont)

*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)

*O. leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Tamiophila grandis* (Ont, Que)

SIPHUNCULATA

*Hoplopleura erratica* (Ont, Que)

*Neohaematopinus sciuropteri* (Ont)

*Tamias striatus griseus* Mearns

UNIRAMIA

SIPHONAPTERA

*Ctenophthalmus p. pseudagyrtes* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

*Megabothris acerbus* (Ont)

*M. asio megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

*Tamiophila grandis* (Ont)

*Tamias striatus lysteri* (Richardson)

UNIRAMIA

DIPTERA

*Cuterebra emasculator* (unspecified)

SIPHONAPTERA

*Eptedia w. wenmanni* (Ont)

*Megabothris acerbus* (Ont)

*Orchopeas h. howardi* (Ont)

*Tamiophila grandis* (Ont)

*Trichopsylla acerbus* (Ont)

*Tamias* spp.

UNIRAMIA

SIPHONAPTERA

*Megabothris acerbus* (Man, Ont)

*Orchopeas leucopus* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

## SCIURIDAE OF UNDETERMINED SPECIES

Chipmunk

CHELICERATA

ACARI

*Dermacentor andersoni* (Alta, BC, Ont)

*Eulaelaps stabularis* (Ont)

*Haemaphysalis leporis-palustris* (BC)

*Ixodes angustus* (BC)

*I. marxi* (BC)

*Laelaps pedalis* (Ont)

UNIRAMIA

SIPHONAPTERA

*Megabothris abantis* (Alta, BC, YT)

*M. acerbus* (Man, Ont)

*Monopsyllus e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)

*Opisodasys k. keeni* (Alta, BC)

*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)

*Tamiophila grandis* (Ont)

*Thrassis acamantis* (Alta, BC)

Gopher

UNIRAMIA

DIPTERA

- Cuterebra* sp. (Sask)  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Foxella ignota recula* (BC)
- Groundhog  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC, Ont)  
*Haemaphysalis leporis-palustris* (BC)  
*Ixodes cookei* (BC, Ont)  
*Laelaps propheticus* (Ont)
- UNIRAMIA  
SIPHONAPTERA  
Siphonaptera gen. spp. (BC)  
*Thrassis acamantis* (Alta, BC)
- Ground squirrel  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta, BC)  
*Ixodes sculptus* (Sask)
- UNIRAMIA  
SIPHONAPTERA  
*Hystrihopsylla dippiei* (Alta)  
*Neopsylla inopina* (Alta)  
*Opisocrostis labis* (Alta)  
*Rhadinopsylla fraterna* (Alta)  
Siphonaptera gen. spp. (BC)
- Marmot  
UNIRAMIA  
SIPHONAPTERA  
Siphonaptera gen. spp. (BC)
- Red squirrel  
UNIRAMIA  
SIPHONAPTERA  
*Monopsyllus ciliatus protinus* (BC)  
*M. e. eumolpi* (Alta, BC, Man, NWT, Ont, Sask, YT)  
*M. vison* (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)  
*O. c. durus* (BC)
- Squirrels  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (BC)  
*Gemasmus* spp. (Ont)  
*Haemaphysalis cinnabarina* (BC)  
*H. leporis-palustris* (Sask)  
*Ixodes angustus* (BC)  
*I. californicus* (BC)  
*I. cookei* (BC)  
*I. marxi* (BC, Ont)  
*I. spinipalpus* (BC)  
*I. texanus* (BC)
- UNIRAMIA  
SIPHONAPTERA  
*Ceratophyllus gallinae* (Man)
- Megarhthroglossus p. procus* (BC)  
*Monopsyllus ciliatus protinus* (BC)  
*M. vison* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Orchopeas caedens durus* (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)  
*Tarsopsylla octodecimentata coloradensis* (Alta, BC, Man, NWT, Ont, Sask, YT)
- Streater's red squirrel  
CHELICERATA  
ACARI  
*Liponyssus* spp. (Ont)  
*Neoschongastia blarinae* (BC)
- Tree squirrel  
CHELICERATA  
ACARI  
*Dermacentor andersoni* (Alta)
- UNIRAMIA  
SIPHONAPTERA  
*Orchopeas c. caedens* (Alta, BC, Man, Que, YT)
- Family ZAPODIDAE  
*Napaeozapus insignis* (Miller) Woodland jumping mouse
- CHELICERATA  
ACARI  
*Androlaelaps fahrenheitzi* (NS, PEI)  
*Androlaelaps* sp. (NS)  
*Dermacarus hypudaei* (NS)  
*D. newyorkensis* (NB, NS, PEI)  
*Dermacentor variabilis* (NS)  
*Echinonyssus isabellinus* (PEI)  
*Euryparasitus* spp. (NB)  
*Gliricoptes zapus* (NB)  
*Gliricoptes* sp. (Que)  
*Glycyphagus hypudaei* (NB)  
*Haemogamasus ambulans* (NB)  
*Haemogamasus* spp. (NS)  
*Ixodes angustus* (NB)  
*I. muris* (NS)  
*Laelaps kochi* (NS, PEI)  
*Listrophorus mexicanus* (NS, Que)  
*Miyatrombicula esoensis* (PEI)  
*Myobia* sp. (Que)  
*Neotrombicula harperi* (NB, NS, PEI, Que)  
*N. microti* (NS, Que)  
*Pygmephorus horridus* (NB)  
*P. mahunkai* (PEI)  
*Radfordia ewingi* (NB, PEI)  
*Radfordia* sp. (NB)
- UNIRAMIA  
SIPHONAPTERA  
*Ctenophthalmus p. pseudagyrtes* (NS)  
*Megabothris a. asio* (NS)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Orchopeas leucopus* (Que)  
*Peromyscopsylla catatina* (Man, NB, NS, Ont)



- Stenoponia americana* (NS)  
SIPHUNCULATA  
*Enderleinellus nitschi* (Que)
- Napaeozapus insignis fructectanus* Jackson  
UNIRAMIA  
SIPHONAPTERA  
*Megabothris quirini* (Alta, BC, NWT, Ont)  
*Peromyscopsylla catatina* (Ont)
- Napeozapus insignis insignis* (Miller)  
CHELICERATA  
ACARI  
*Ixodes muris* (NS)  
UNIRAMIA  
SIPHONAPTERA  
*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla catatina* (Man, Nfld, NS, Ont)  
*Stenoponia americana* (Man, NS, Ont, Que)
- Napaeozapus* spp.  
UNIRAMIA  
SIPHONAPTERA  
*Ctenophthalmus p. pseudagyrtis* (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)  
*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
- Zapus hudsonius* (Zimmerman) Meadow jumping mouse  
CHELICERATA  
ACARI  
*Androlaelaps fahrenheitsi* (NB, NS, PEI)  
*Androlaelaps* sp. (NS)  
*Dermacarus newyorkensis* (NB, NS, PEI)  
*Dermacentor variabilis* (Man, NS)  
*Echinonyssus isabellinus* (PEI)  
*Haemogamasus ambulans* (PEI)  
*Hyperlaelaps* sp. (NS)  
*Ixodes angustus* (NB)  
*I. muris* (NB, NS, PEI)  
*Laelaspis* sp. (NS)  
*Listrophorus mexicanus* (PEI)  
Myobiidae gen. spp. (Ont)  
*Neotrombicula harperi* (NB, NS, PEI, Que)  
*N. lipovskyi* (NB)  
*N. microti* (NS)  
*Ololaelaps* sp. (NS)  
*Orycteroxenus soricis* (NS)  
*Pygmephorus mahunkai* (PEI)  
*Radfordia ewingi* (NB)  
Trombiculidae gen. spp. (Ont)  
*Xenoryctes latiporus* (NB)  
UNIRAMIA  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Corrodopsylla c. curvata* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Megabothris abantis* (Alta, BC, YT)  
*M. asio* (NS)
- M. a. asio* (Nfld, Ont, Que, Sask, YT)  
*M. a. megacolpus* (Alta, BC, Man, NWT, Ont, Que, Sask, YT)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask, YT)
- Zapus hudsonius acadicus* (Dawson)  
CHELICERATA  
ACARI  
*Dermacentor variabilis* (NS)  
*Ixodes muris* (NS)
- Zapus hudsonius canadensis* (Davies)  
Syn.: *Zapus hudsonius ontarioensis* Anderson  
CHELICERATA  
ACARI  
*Androlaelaps fahrenheitsi* (Ont)  
*Haemogamasus hirsutus* (Ont)
- Zapus princeps* Allen Western jumping mouse  
UNIRAMIA  
SIPHONAPTERA  
*Hystrihopsylla d. dippiei* (Alta, Sask)  
*Megabothris quirini* (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)  
*Peromyscopsylla selenis* (Alta, BC, Man, NWT, Sask, YT)
- Zapus princeps idahoensis* Davis  
UNIRAMIA  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Sask)  
*Megabothris abantis* (Alta, BC)
- Zapus princeps minor* Preble  
UNIRAMIA  
SIPHONAPTERA  
*Epitedia w. wenmanni* (Alta, BC, Man, NB, NWT, Ont, Sask)  
*Hystrihopsylla d. dippiei* (Alta, Sask)  
*Megabothris quirini* (Alta, BC, NWT, Ont)  
*Monopsyllus eumolpi* (Alta, BC, Ont, Sask)
- Zapus trinotatus trinotatus* Rhoads Pacific jumping mouse  
UNIRAMIA  
SIPHONAPTERA  
*Hystrihopsylla o. occidentalis* (BC)  
*Megabothris abantis* (Alta, BC)
- Zapus* spp.  
UNIRAMIA  
SIPHONAPTERA  
*Catallagia decipiens* (Alta, BC, Man, Sask, YT)  
*Corrodopsylla c. curvata* (Alta)  
*Ctenophthalmus p. pseudagyrtis* (Que)  
*Epitedia scapani* (BC)  
*Malaraeus telchinus* (Alta, BC)  
*Megabothris abantis* (Alta, BC, YT)  
*M. a. asio* (NB, Nfld, NS, Ont, PEI, Que)

*M. a. megacolpus* (Man)  
*M. quirini* (Alta, BC, Man, NB, Nfld, NS,  
NWT, Ont, Que, Sask, YT)  
*Monopsyllus wagneri systaltus* (Alta, Man,  
Ont, Sask)  
*M. w. wagneri* (Alta, BC)  
*Opisodasys k. keeni* (Alta, BC)  
*Peromyscopsylla selenis* (Alta)

#### RODENTIA OF UNDETERMINED SPECIES

Rodents

CHELICERATA

ACARI

*Dermacentor venustus* (BC)

*Ixodidae* gen. sp. (Alta, BC)

UNIRAMIA

SIPHONAPTERA

*Rectofrontia fraterna* (BC)  
*Siphonaptera* gen. spp. (BC)

#### MAMMALIA OF UNDETERMINED SPECIES

Mammalia gen. spp.

CHELICERATA

ACARI

*Dermacentor albipictus* (BC)

*D. andersoni* (Alta)

*D. variabilis* (NS)

*Haemaphysalis expositicius* (Man)

UNIRAMIA

DIPTERA

*Cuterebra americana* var. *polita* (BC)

*C. fasciata* (BC, NB)

*C. similis* (BC)

*C. tenebrosa* (BC)

SIPHONAPTERA

*Nosopsyllus fasciatus* (Ont)

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<i>Ixodes californicus</i>	11		
<i>Ixodes cookei</i>	12		
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<i>Ixodes pacificus</i>	12		
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<i>Laelaps kochi</i>	8	
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<i>Listrophorus leuckarti</i>	2	
<i>Listrophorus mexicanus</i>	2	
<i>Listrophorus mexicanus squamiferus</i>	2	
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<i>Listrophorus ondatrae</i>	2	
<i>Listrophorus phenacomys</i>	2	
<i>Listrophorus synaptomys</i>	2	
<i>Listrophorus validus</i>	2	
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<i>Megabothris atrox</i>	20	
<i>Megabothris calcarifer gregsoni</i>	20	
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<i>Neohaematopinus marmotae</i>	43	<i>Otodectes cynotis</i>	3
<i>Neohaematopinus sciurinus</i>	43	<i>Otobius megnini</i>	10
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<i>Neotrombicula basignata</i>	5	<i>Peromyscopsylla ravalliensis</i>	40
<i>Neotrombicula harperi</i>	5	<i>Peromyscopsylla scotti</i>	40
<i>Neotrombicula lipovskyi</i>	5	<i>Peromyscopsylla selenis</i>	40
<i>Neotrombicula microti</i>	6	<i>Phormia regina</i>	14
<i>Neotrombicula microti</i>	6	<i>Platypssyllus castoris</i>	14
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<i>Ololaelaps</i> spp.	9	<i>Psorergates cinereus</i>	4
<i>Ondatra laelaps multispinosa</i>		<i>Psorergates simplex</i>	4
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<i>Pygmephorus mahunkai</i>	5
<i>Pygmephorus moreo</i>	5
<i>Pygmephorus moreo</i>	5
<i>Pygmephorus nidicolus</i>	5
<i>Pygmephorus whitakeri</i>	5
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